

#### ALCIAN BLUE-P.A.S. KIT

The kit contains:

Alcian Blue solution pH 2.5
BioSchiff reagent
HCL reagent, P.A.S.
Hematoxylin ML
Periodic acid, 0.8% solution
Sodium metabisulphite, solution
Sodium tetraborate, solution



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| Trading name: | ALCIAN BLUE SOLUTION pH 2.5 |                      |             |            |  |
|---------------|-----------------------------|----------------------|-------------|------------|--|
| Product code: | AB10-OT-X**                 | Date of compilation: | 21 Dec 2022 | Version: 4 |  |

| SECTI | ON 1: Identification of  | the subst  | ance/mixture a  | nd of the company/undertaking                      |  |
|-------|--|--|---|--|--|
| 1.1.  | Product identifier   |  |   |  |  |
|       | Trading name:  | ALCIAN   | N BLUE SOLUTIO  | N pH 2.5   |  |
|       | Chemical name:   | -  |   |  |  |
|       | Catalogue number:  | AB2-O  | T-X**   |  |  |
| 1.2.  | Relevant identified us   | es of the  | substance or mix  | cture and uses advised against                     |  |
|       | Uses:  |  | For staining aci  | id mucopolysaccharides of intestinal goblet cells. |  |
|       | Uses advised against:  |  | Only the identi   | fied uses are advised.                             |  |
|       | Reason why uses advised against:                                     |  | The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes |  |  |
| 1.3.  | Details of the supplier  | Details of the supplier of the safety data sheet |   |  |  |
|       | Supplier:  |  | BioGnost Ltd.   |  |  |
|       | Address:   |  | Medjugorska 59, Zagreb  |  |  |
|       | Telephone number:  |  | +385 1 2409997  |  |  |
|       | Telephone number:  |  | +385 1 24099  | 97   |  |
|       | Telephone number: Fax no.:   |  | +385 1 24099<br>+385 1 24040  |  |  |
|       | •  | erson:   |   | 39   |  |
|       | Fax no.:   | person:  | +385 1 24040  | 39   |  |
| 1.4.  | Fax no.: e-mail of competent p                                       |  | +385 1 24040<br>msds@biogno   | 39   |  |
| 1.4.  | Fax no.: e-mail of competent p                                       | number   | +385 1 24040<br>msds@biogno   | 39   |  |
| 1.4.  | Fax no.: e-mail of competent p National contact: Emergency telephone | number   | +385 1 24040<br>msds@biogno   | 39<br>ost.hr                                       |  |

| SECTIO  | ON 2. Hazards identification                                   |   |                 |  |  |  |
|---------|--|---|-----------------|--|--|--|
| 2.1.    | Classification of the substance or mixture                     |   |                 |  |  |  |
| 2.1.1.  | Classification according to Regulation (EC) No 1272/2008 (CLP) |   |                 |  |  |  |
|         | Hazard class and category                                      | Hazard class and category code: Hazard statements*: |                 |  |  |  |
|         | Not identified as hazardous substance                          |   |                 |  |  |  |
| 2.1.2.  | Additional information   |   |                 |  |  |  |
|         | -  |   |                 |  |  |  |
| *For fu | ll text of Hazard- and EU Hazard-sta                           | tements: see S                                      | ection 16       |  |  |  |
| 2.2.    | Label elements   |   |                 |  |  |  |
|         | Product identification:  | ALCIAN BLUE   | SOLUTION pH 2.5 |  |  |  |
|         | Identification number:   | -   |                 |  |  |  |
|         | Authorization no.:   |   |                 |  |  |  |
|         | Hazard pictograms:   | -   |                 |  |  |  |



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|      | Signal word:   | -   |  |  |  |
|------|--|-----|--|--|--|
|      | Hazard statements:   | -   |  |  |  |
|      | Precautionary statements:  | -   |  |  |  |
|      | Further information:   | -   |  |  |  |
| 2.3. | Other hazards  |     |  |  |  |
|      | <b>Endocrine Disrupting Propertie</b>  | ss: |  |  |  |
|      | No known endocrine disrupting properties   |     |  |  |  |
|      | <b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance is not a PBT or a vPvB. |     |  |  |  |

| SECTION 3. Composition/information on ingredients |                          |                                |                     |  |  |  |
|---|--------------------------|--------------------------------|---------------------|--|--|--|
| CAS/<br>EC/<br>Index no.                          | REACH<br>Registration No | Weight % content<br>(or range) | Identification name | Classification according to<br>Regulation (EC) No 1272/2008<br>(CLP) |  |  |
| 64-19-7/<br>200-580-7/<br>607-002-00-6            | -                        | ≤ 3%                           | Acetic acid, 99.5%  | Flam. Liq. 3; H226<br>Skin Corr. 1 A; H314                           |  |  |

| SECTIO | ON 4. First aid measures          |         |  |  |
|--------|-----------------------------------|---------|--|--|
| 4.1.   | Description of first aid measures |         |  |  |
|        | General notes:                    |         | -  |  |
|        | Following inhalation:             |         | No information available                   |  |
|        | Following skin contact:           |         | No information available                   |  |
|        | Following eye contact:            |         | No information available                   |  |
|        | Following ingestion:              |         | No information available                   |  |
|        | Self-protection of the first a    | ider:   | Treat symptomatically.                     |  |
| 4.2.   | Most important symptoms a         | and eff | fects, both acute and delayed              |  |
|        | Following inhalation:             | No i    | nformation available                       |  |
|        | Following skin contact:           | No i    | nformation available                       |  |
|        | Following eye contact:            | No i    | nformation available                       |  |
|        | Following ingestion:              | No i    | No information available                   |  |
| 4.3.   | Indication of any immediate       | medi    | cal attention and special treatment needed |  |
|        | -                                 |         |  |  |

| SECTIO | ON 5 Firefighting measures |
|--------|----------------------------|
| 5.1.   | Extinguishing media        |



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|      | Suitable extinguishing media:  | Small fire - water spray, dry powder, CO <sub>2</sub> Large fire - water spray or alcohol-resistant foam |  |
|------|--|--|--|
|      | Unsuitable extinguishing media:  | water jet  |  |
| 5.2. | Special hazards arising from the substance or mixture  |  |  |
|      | Hazardous combustion products:   | No information available   |  |
| 5.3. | Advice for firefighters  |  |  |
|      | Use a self-contained open-circuit Cool closed containers exposed to                                | compressed air breathing apparatus and fireproof clothing.  o fire with water spray or vapor.            |  |
| 5.4. | Additional information   |  |  |
|      | Remove sources of heat and ignition.  Do not contaminate the environment with extinguishing media. |  |  |

| SECTIO | ON 6. Accidental release meas   | ures  |  |  |
|--------|---|---|--|--|
| 6.1.   | Personal precautions, protect   | ive equipment and emergency procedures  |  |  |
| 6.1.1. | For non-emergency personnel   |   |  |  |
|        | Protective equipment:   | Use personal protective equipment (see Section 8).  |  |  |
|        | Accident prevention methods   | Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke.  |  |  |
|        | Emergency procedures:   | Mark the area using proper signs.   |  |  |
| 6.1.2. | For emergency responders:   |   |  |  |
|        | Wear protective equipment (see Section 8).  |   |  |  |
| 6.2.   | Environmental precautions:  |   |  |  |
|        | Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112. |   |  |  |
| 6.3.   | Methods and material for containment and cleaning up  |   |  |  |
| 6.3.1. | Bunding, covering of drains; capping procedures:  | Sand or clay barriers.  |  |  |
| 6.3.2. | Cleaning up:  | Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water. |  |  |
| 6.3.3. | Other information:  | -   |  |  |
| 6.4.   | Reference to other sections   |   |  |  |



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See Section 7 for information about secure handling.

See Section 8 for information about personal protective equipment.

See Section 13 for information about containment.

| SECTIO | ON 7. Handling and storage   |  |  |  |  |  |
|--------|--|--|--|--|--|--|
| 7.1.   | Precautions for safe handling  |  |  |  |  |  |
| 7.1.1. | Protection measures  |  |  |  |  |  |
|        | Measures to prevent fire:  | Keep away from sources of heat and ignition. Do not smoke.   |  |  |  |  |
|        | Measures to prevent aerosol and dust generation:   | Secure proper ventilation.   |  |  |  |  |
|        | Measures to protect the environment:  Other measures:  | Prevent spilling into the sewage system and waterways.   |  |  |  |  |
| 7.1.2. | Advice on general occupational hygiene:  |  |  |  |  |  |
|        | Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating. |  |  |  |  |  |
| 7.2.   | Conditions for safe storage, including any incompatibilities                                     |  |  |  |  |  |
|        | Technical measures and storage conditions:   | Keep in tightly closed and upright set containers in a well ventilated storage rooms, and away from sources of heat, sunlight, and other incompatible substances.                    |  |  |  |  |
|        | Packaging materials:   | Manufacturer's original packaging.   |  |  |  |  |
|        | Requirements for storage rooms and vessels:  | Keep away from food and drink. Keep the containers tightly closed.   |  |  |  |  |
|        | Advices for storage equipment:   | The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.          |  |  |  |  |
|        | Further information on storage conditions:   | Do not place the unused material in the storage room<br>and do not use empty containers for storing other<br>chemicals. Do not store with incompatible materials (see<br>Section 9). |  |  |  |  |
| 7.3.   | Specific end use(s)  |  |  |  |  |  |
|        | Recommendations:   | -  |  |  |  |  |
|        | Industrial sector specific solutions:  | -  |  |  |  |  |

| SECTION 8. Exposure controls/personal protection |                         |  |     |                               |                         |  |  |  |
|--|-------------------------|--|-----|-------------------------------|-------------------------|--|--|--|
| 8.1.   | 8.1. Control parameters |  |     |                               |                         |  |  |  |
|  | Substance CAS No        |  |     | exposure limit<br>term values | Biological limit values |  |  |  |
|  |                         |  | ppm | mg/m³                         |                         |  |  |  |



|                    |            |   |                                       |                          |                        |                          |         |                |           | Page 5 of 16                             |
|--------------------|------------|---|---------------------------------------|--------------------------|------------------------|--------------------------|---------|----------------|-----------|--|
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| Product code:      |            | AB10-OT-X** Date  |                                       | Date o                   | of compilation: 21 Dec |                          | ec 2022 | Version: 4     |           |  |
|                    | :          |   |                                       | :                        | •                      |                          |         | :              |           | 1 1                                      |
| -                  |            |   | -                                     |                          |                        | -                        |         | -              | No inform | nation available                         |
|                    | :          |   |                                       |                          |                        |                          |         |                |           |  |
| Substance          | _          |   |                                       |                          |                        |                          |         |                |           |  |
| name:              |            |   | I                                     |                          |                        |                          |         |                |           |  |
| EC No:             | -          |   | CAS No:                               | -                        |                        |                          |         |                |           |  |
| DNEL               |            |   |                                       |                          |                        |                          |         |                |           |  |
| _                  |            |   | _                                     |                          |                        | lustrial                 |         |                |           |  |
| Route of exposure: |            |   | Acute<br>ect local                    |                          | Acut                   |                          |         | Chro<br>effect |           | Chronic                                  |
| Oral               |            | ene   | ect iocai                             | _                        | ffect sys              | terriic                  | _       | enect          | iocai     | effect systemic                          |
| Inhalation         |            | -<br> -   |                                       | _                        |                        |                          | _       |                |           | _  |
| Dermal             |            |   |                                       | _                        |                        |                          | _       |                |           | _  |
|                    | sical nar  | ameters: «  | solubility, fla                       |                          | nility cor             | rosivity.                |         | _              |           |  |
| Circledi priy      | sicui pui  | <u> </u>  | Joid Dilley, 110                      | arrina c                 |                        | nsumer                   |         |                |           |  |
| Route of           |            |   | Acute                                 | Acut                     |                        |                          | Chronic |                | nic       | Chronic                                  |
| exposure:          |            |   |                                       |                          | ffect sys              |                          |         | effect local   |           | effect systemic                          |
| Oral               |            | -   |                                       | _                        |                        |                          | -       |                |           | -  |
| Inhalation         |            | -   |                                       | -                        |                        |                          | -       |                |           | -  |
| Dermal             |            | -   |                                       | -                        |                        |                          | -       |                |           | -  |
| PNEC               |            |   |                                       |                          |                        |                          | I.      |                |           |  |
| Environmen         | ntal prote | ection tar  | get                                   |                          |                        | PNEC                     |         |                |           |  |
| Fresh water        |            |   |                                       |                          |                        | No infor                 | natio   | n availab      | le        |  |
| Freshwater         | sedimer    | nts   |                                       |                          |                        | No information available |         |                |           |  |
| Marine wat         | er         |   |                                       |                          |                        | No information available |         |                |           |  |
| Marine sedi        | iments     |   |                                       |                          |                        | No information available |         |                |           |  |
| Food chain         |            |   |                                       |                          |                        | No information available |         |                |           |  |
| Microorgan         | isms in s  | sewage tr   | eatment                               |                          |                        | No information available |         |                |           |  |
| Soil (agricul      | ltural)    |   |                                       |                          |                        | No information available |         |                |           |  |
| Air                |            |   |                                       | No information available |                        |                          |         |                |           |  |
|                    |            |   |                                       |                          |                        |                          |         |                |           |  |
| 8.2.               | Exposu     | sure controls   |                                       |                          |                        |                          |         |                |           |  |
| 8.2.1.             | Approp     | oriate eng  | ineering co                           | ntrols                   |                        |                          |         |                |           |  |
|                    | measu      | res to pre  | ire related<br>vent exposu<br>I uses: | ıre                      |                        | •                        |         |                |           | lse personal protective<br>he workspace. |
|                    | Structu    | during identified uses:  Structural measures to prevent exposure:  No information available |                                       |                          |                        |                          |         |                |           |  |



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|          | Organisational measures prevent exposure:               | to  | Organization of work in order to reduce other worker's influence during work process.  |  |  |  |  |  |
|----------|---|---|--|--|--|--|--|--|
|          | Technical measures to prexposure:                       | event   | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.   |  |  |  |  |  |
| 8.2.2.   | Personal protection equi                                | pment   |  |  |  |  |  |  |
| 8.2.2.1. | Eye and face protection:                                |   | Safety glasses that stick to face (preventing splashing) (EN 166) or visor.  |  |  |  |  |  |
| 8.2.2.2. | Skin protection   |   |  |  |  |  |  |  |
|          |   |   | tive gloves must be according to the EU Directive 2016/425/EEC and ard EN 374.   |  |  |  |  |  |
|          | Hand protection:  |   | Glove material: nitrile rubber   |  |  |  |  |  |
|          |   |   | Glove thickness: ≥0.50 mm  |  |  |  |  |  |
|          |   |   | Break through time: >480 min   |  |  |  |  |  |
|          | Other skin protection:                                  | Wear antistatic clothing made of natural fibers (such as cotton) with long sleeves (EN 13034), and shoes that cover the entire foot (EN 10335). |  |  |  |  |  |  |
| 8.2.2.3. | Respiratory protection:                                 | filter fo   | tive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN ) used when concentration levels exceed GVI. |  |  |  |  |  |
| 8.2.2.4. | Thermal hazards:  | No inf  | ormation available   |  |  |  |  |  |
| 8.2.3.   | Environmental exposure controls                         |   |  |  |  |  |  |  |
|          | Substance/mixture related measures to prevent exposure: |   | See Section 6  |  |  |  |  |  |
|          | Structural measures to prevent exposure:                |   | Use modern equipment.  |  |  |  |  |  |
|          | Organisational measures prevent exposure:               | to  | Adapt the work process to the required working conditions of the workplace.  |  |  |  |  |  |
|          | Technical measures to prevent exposure:                 |   | See Section 6  |  |  |  |  |  |

| SECTI | SECTION 9. Physical and chemical properties               |   |                          |  |  |  |  |
|-------|---|---|--------------------------|--|--|--|--|
| 9.1.  | Information on basic physical and chemical properties     |   |                          |  |  |  |  |
|       |   | Value                                     | Method                   |  |  |  |  |
|       | Physical state:   | liquid                                    | No information available |  |  |  |  |
|       | Colour:   | blue                                      | No information available |  |  |  |  |
|       | Odour/odour threshold:                                    | acetic acid like/no information available | No information available |  |  |  |  |
|       | Melting point / freezing point:                           | No information available                  | No information available |  |  |  |  |
|       | Boiling point or initial boiling point and boiling range: | No information available                  | No information available |  |  |  |  |



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|      | Flammability:                                      | No information available | No information available |
|------|--|--------------------------|--------------------------|
|      | Lover and upper explosion limit:                   | No information available | No information available |
|      | Flash point:                                       | No information available | No information available |
|      | Auto-ignition temperature:                         | No information available | No information available |
|      | Decomposition temperature:                         | No information available | No information available |
|      | рН:  | 2.45 -2.55               | No information available |
|      | Kinematic viscosity:                               | No information available | No information available |
|      | Solubility:  | No information available | No information available |
|      | Partition coefficient n-octanol/water (log value): | No information available | No information available |
|      | Vapour pressure:                                   | No information available | No information available |
|      | Density and/or relative density:                   | No information available | No information available |
|      | Relative vapour density:                           | No information available | No information available |
|      | Particle characteristics:                          | No information available | No information available |
| 9.2. | Other information                                  |                          |                          |
|      | -  |                          |                          |

| SECTIO | SECTION 10. Stability and reactivity |  |  |  |  |
|--------|--------------------------------------|--|--|--|--|
| 10.1.  | Reactivity:                          | See subsections 10.3 through 10.5.   |  |  |  |
| 10.2.  | Chemical stability:                  | The product is chemically stable under standard ambient conditions of storing and using. |  |  |  |
| 10.3.  | Possibility of hazardous reactions:  | No information available.  |  |  |  |
| 10.4.  | Conditions to avoid:                 | No information available.  |  |  |  |
| 10.5.  | Incompatible materials:              | No information available.  |  |  |  |
| 10.6.  | Hazardous decomposition products:    | No information available.  |  |  |  |

| SECTION 11. Toxicological information |                                      |         |   |                  |         |  |  |
|---------------------------------------|--------------------------------------|---------|---|------------------|---------|--|--|
| 11.1. Informati                       | Information on toxicological effects |         |   |                  |         |  |  |
| Acute to                              | Acute toxicity:                      |         |   |                  |         |  |  |
| Route of exposure:                    | Method                               | Species | Effective dose<br>LD <sub>50</sub> /LC <sub>50</sub> or<br>ATE <sub>mixture</sub> | Exposure<br>time | Results |  |  |
| Oral exposure:                        | No information available             | -       | LD <sub>50</sub>  | -                | -       |  |  |
| Dermal exposure:                      | No information available             | _       | LD <sub>50</sub>  | -                | _       |  |  |



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|                    |                             |                                |                                |                           |              |                |         |
| Inhalation         | No informatio               | n _                            |                                | LC <sub>50</sub>          | _            | -              | -       |
| exposure:          | available                   |                                |                                |                           |              |                |         |
|                    |                             |                                | (CTOT CE)                      |                           |              |                |         |
| Specific t         | arget organ toxicit         |                                | osure (STOT SE):               |                           |              |                | NI-+-   |
|                    |                             | cific effects                  |                                | Target o                  |              |                | Note    |
| Oral exposure:     |                             | tion available                 |                                | mation av                 |              | -              |         |
| Dermal exposure:   |                             | tion available                 |                                | mation av                 |              | -              |         |
| Inhalation exposu  | re: No informa              | tion available                 | No infor                       | mation av                 | /aılable     | -              |         |
|                    |                             |                                |                                |                           |              |                |         |
| Respirato          | ory irritation:             | N                              | o information a                | vailable                  |              |                |         |
|                    |                             |                                |                                |                           |              |                |         |
| Irritation         | and corrosion               |                                |                                |                           |              |                | NI .    |
| CI                 | Exposure time               |                                |                                | luation                   | Metho        |                | Note    |
| Skin irritation:   | -                           | -                              | -                              |                           | -            | -              |         |
| Eye irritation:    | -                           | -                              | -                              |                           | -            | _              |         |
|                    |                             |                                |                                |                           |              |                |         |
| Sensitizat         |                             |                                |                                |                           |              |                |         |
| Dermal exposure:   | No information              | available                      |                                |                           |              |                |         |
| Inhalation         | No information              | available                      |                                |                           |              |                |         |
| exposure:          |                             |                                |                                |                           |              |                |         |
| Symptom            | ns related to the ph        | vsical chemic                  | al and toxicolog               | ical chara                | acteristics  |                |         |
| Oral exposure:     | No information              | -                              | ar arra toxicolog              | icai citate               | 2001130103   |                |         |
| Dermal exposure:   | No information              |                                |                                |                           |              |                |         |
| Inhalation         |                             |                                |                                |                           |              |                |         |
| exposure:          | No information              | available                      |                                |                           |              |                |         |
| Eye exposure:      | No information              | available                      |                                |                           |              |                |         |
| -                  |                             |                                |                                |                           |              |                |         |
| Repeated           | I dose toxicity (sub        | acute, subchro                 | onic, chronic)                 |                           |              |                |         |
|                    | Dose                        | Exposure time                  | Species                        | Method                    | d Evaluat    | tion           | Note    |
| Subacute oral      | No information available    | No<br>information<br>available | No<br>information<br>available | No<br>informa<br>n availa | atio availah | ormation<br>le | -       |
| Subacute<br>dermal | No information available    | No<br>information<br>available | No<br>information<br>available | No<br>informa<br>n availa | atio availah | ormation<br>le | -       |



Subacute

inhalation

### SAFETY DATA SHEET According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

No

informatio

n available

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No information

available

| Trading name: | ALCIAN BLUE SOLUTION pH 2.5 |                      |             |            |  |  |
|---------------|-----------------------------|----------------------|-------------|------------|--|--|
| Product code: | AB10-OT-X**                 | Date of compilation: | 21 Dec 2022 | Version: 4 |  |  |

information

available

No

No

information

available

No information

available

|   |   |   | avallable   | avallable   |  |                                 |   |      |
|---|---|---|---|---|--|---------------------------------|---|------|
| Subchronic oral   | No i  | information<br>ble  | No<br>information<br>available  | No<br>information<br>available  | No<br>informatio<br>n available  | No infor                        |   | -    |
| Subchronic No information dermal available  |   | No<br>information<br>available  | No<br>information<br>available  | No<br>informatio<br>n available   | No infor   |                                 | - |      |
| Subchronic No information nhalation available   |   | No<br>information<br>available  | No<br>information<br>available  | No<br>informatio<br>n available   | No infor   |                                 | - |      |
| Chronic oral  | Chronic oral No information available                   |   | No<br>information<br>available  | No<br>information<br>available  | No<br>informatio<br>n available  | No infor                        |   | -    |
| Chronic dermal  | Chronic dermal No information available                 |   | No<br>information<br>available  | No<br>information<br>available  | No<br>informatio<br>n available  | No infor                        |   | -    |
| Chronic<br>inhalation   | No i<br>availa  | information<br>ble  | No<br>information<br>available  | No<br>information<br>available  | No<br>informatio<br>n available  | No infor                        |   | -    |
|   |   |   |   |   |  | :                               |   |      |
|   |   |   |   | :   | ;  | 1                               |   | :    |
| Specific  | target  | organ toxicit   | y – repeated e  | xposure (STOT   | RE):   | ;                               |   | ,    |
| Specific  | target  |   | y – repeated e  | xposure (STOT   | RE):<br>Target organ   | 1                               |   | Note |
| i •   | target  | Spe   | · · · · · · · · · · · · · · · · · · ·   |   |  | ole                             | _ | Note |
| Subacute oral<br>Subacute dermal  | <u> </u>  | Spe<br>No informa   | cific effects   | No info   | Target organ   |                                 | - | Note |
| Subacute oral Subacute dermal Subacute inhalat  | <u> </u>  | Spe<br>No informa<br>No informa   | cific effects<br>ation available<br>ation available<br>ation available  | No info   | Target organ<br>rmation availab<br>rmation availab<br>rmation availab  | ole                             |   | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral  | l   | Spe<br>No informa<br>No informa<br>No informa   | cific effects<br>ation available<br>ation available<br>ation available<br>ation available   | No info No info No info No info   | Target organ rmation availab rmation availab rmation availab rmation availab   | ole<br>ole                      | - | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic derm  | l<br>ion<br>nal   | Spe<br>No informa<br>No informa<br>No informa<br>No informa   | cific effects<br>ation available<br>ation available<br>ation available<br>ation available<br>ation available  | No info No info No info No info No info   | Target organ rmation availab rmation availab rmation availab rmation availab rmation availab   | ole<br>ole<br>ole               | - | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic derm Subchronic inhal   | l<br>ion<br>nal   | Spe<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa                                     | cific effects ation available ation available ation available ation available ation available ation available   | No info No info No info No info No info No info   | Target organ rmation availab rmation availab rmation availab rmation availab rmation availab rmation availab   | ole<br>ole<br>ole<br>ole        | - | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic derm Subchronic inhal Chronic oral                                  | l<br>ion<br>nal   | Spe<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa                       | cific effects ation available   | No info   | Target organ rmation availab   | ole<br>ole<br>ole<br>ole<br>ole |   | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic derm Subchronic inhal Chronic oral                                  | l<br>ion<br>nal<br>ation                                | Spe<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa         | cific effects ation available   | No info   | Target organ rmation availab   | ole ole ole ole ole ole ole     |   | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic derm Subchronic inhal Chronic oral                                  | l<br>ion<br>nal<br>ation                                | Spe<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa         | cific effects ation available   | No info   | Target organ rmation availab   | ole ole ole ole ole ole ole     |   | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic inhal Chronic oral Chronic dermal Chronic inhalatio                 | l<br>ion<br>nal<br>ation                                | Spe<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa         | cific effects ation available   | No info   | Target organ rmation availab                                 | ole ole ole ole ole ole ole     |   | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic inhal Chronic oral Chronic dermal Chronic inhalatic                 | l<br>ion<br>nal<br>ation                                | Spe<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa<br>No informa         | cific effects ation available   | No info   | Target organ rmation available toxicity) | ole ole ole ole ole ole ole     |   | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic derm Subchronic inhal Chronic oral Chronic dermal Chronic inhalatio | lion nal ation on fects (ca                             | Spe No informa arcinogenicity V: | cific effects ation available   | No info   | Target organ rmation available toxicity)                                     | ole ole ole ole ole ole ole     |   | Note |
| Subacute oral Subacute dermal Subacute inhalat Subchronic oral Subchronic inhal Chronic oral Chronic dermal Chronic dermal                    | l<br>ion<br>nal<br>ation<br>on<br>fects (ca<br>genicity | Spe No informa arcinogenicity V: | cific effects ation available | No info vo info | Target organ rmation availab                                 | ole ole ole ole ole ole ole     |   | Note |



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|         | Germ cell mutagenicity:  | No information available                     |
|---------|--|--|
|         | Reproductive toxicity:   | No information available                     |
|         |  |  |
|         | Summary of evaluation of the C   | MR properties: -                             |
|         |  |  |
| 11.2    | Information on other hazards:  |  |
| 11.2.1. | Endocrine disrupting properties  |  |
|         | The substance/mixture does contain components consider have endocrine disrupting praccording to REACH Article Commission Delegated regulat 2017/2100 or Commission Re(EU) 2018/605 at levels of (higher. | ered to roperties 57(f) or ion (EU) gulation |
| 11.2.2. | Other informations:  |  |
|         | -  |  |

#### **SECTION 12. Ecological information**

#### 12.1. Toxicity

| Acute toxicity       | Dose             | Exposure<br>time | Species                  | Method                         | Evaluation | Note |
|----------------------|------------------|------------------|--------------------------|--------------------------------|------------|------|
| Fish                 | LC <sub>50</sub> | 96 hours         | No information available | No<br>information<br>available | -          | 1    |
| Crustacea:           | EC <sub>50</sub> | 48 hours         | No information available | No<br>information<br>available | -          | -    |
| Algae/aquatic plants | IC <sub>50</sub> | 8 days           | No information available | No<br>information<br>available | -          | -    |
| Microorganisms       | LC <sub>50</sub> | 72 hours         | -                        | -                              | -          | -    |
| Chronic toxicity     | Dose             | Exposure<br>time | Species                  | Method                         | Evaluation | Note |
| Fish                 | LC <sub>50</sub> | 96 hours         | No information available | No<br>information<br>available | -          | 1    |
| Crustacea:           | EC <sub>50</sub> | 48 hours         | No information available | No<br>information<br>available | -          | -    |



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| Trading nam              | ie:    |                                     |         |          | ALCIAN BLUE              | SOLU  | JTION pH                 | 2.5        |                           |      |
|--------------------------|--------|-------------------------------------|---------|----------|--------------------------|-------|--------------------------|------------|---------------------------|------|
| Product code             | e:     | AB10-OT-X**                         |         |          | Date of compilation:     |       | 21 Dec                   | 2022       | Version:                  | 4    |
| Algae/aquatic<br>plants  | -      | IC <sub>50</sub>                    | 72 ho   | ours     | No information available |       | rmation<br>lable         | _          | _                         |      |
| Other organis            | ms     | -                                   | -       |          | -                        | -     |                          | _          | -                         |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          |        | e and degradal                      | oility  |          |                          |       |                          |            |                           |      |
| Abio                     |        | gradation                           |         | -        |                          |       |                          |            |                           |      |
|                          | D      | egradation hal                      | f-lives |          | Method                   |       |                          | Evaluation | 1                         | Note |
| Marine<br>water          | No i   | information av                      | ailable | No       | information avai         | lable | No inform                | ation ava  | ilable                    | -    |
| Fresh water              | No i   | information av                      | ailable | No       | information avai         | lable | No inform                | ation ava  | ilable                    | -    |
| Air                      |        | information av                      |         |          | information avai         |       | No inform                | ation ava  | ilable                    | -    |
| Soil                     | No i   | information av                      | ailable | No       | information avai         | lable | No inform                | ation ava  | ilable                    | -    |
| **                       |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          | egrada |                                     |         |          |                          |       |                          |            |                           |      |
| % Degradation            |        | Time (day                           |         |          | Method                   |       | Evaluation               |            | Note                      |      |
| No information available |        | lo infori<br>vailable               | mation  |          |                          |       |                          |            | o information<br>railable |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
| 12.2 Pi                  |        | lati aataatia                       |         | :        |                          | :     |                          | :          |                           |      |
|                          |        | lative potentia<br>pefficient: n-oc |         | water (l | og Kow):                 |       |                          |            |                           |      |
| Value                    |        | centration                          | рН      | °(       |                          |       | Evalua                   | ition      | No                        | ıte  |
|                          | No     | information                         | РП      |          | No informat              |       | No inform                |            | 110                       |      |
| -                        | availa |                                     | -       | -        | available                |       | available                |            | -                         |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          | oncent | tration factor (                    | BCF)    |          |                          |       |                          |            |                           |      |
| Value                    |        | Species                             |         |          | Method                   |       | Evaluati                 |            | No                        |      |
| No information available | n      | No inform available                 | ation   |          |                          |       | No information available |            | No information available  |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          |        |                                     |         |          |                          |       |                          |            |                           |      |
|                          |        | otoxicity                           |         |          |                          |       |                          |            |                           |      |



Endocrine disrupting properties

12.6.

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| Va                                   | alue                              | Dose                     | Exposure<br>time           | Species                      | Method                         | Evaluat                        | ion Note           |
|--------------------------------------|-----------------------------------|--------------------------|----------------------------|------------------------------|--------------------------------|--------------------------------|--------------------|
| Chronic toxi                         | city on fish                      | LC <sub>50</sub>         |                            |                              | No information available       |                                | ation -            |
| Chronic toxi<br>crustacea ( <i>D</i> | •                                 | EC <sub>50</sub>         | information ir             | lo<br>nformation<br>vailable | No<br>information<br>available | No inform available            | ation <sub>-</sub> |
| 12.4. Mo                             | bility in soil                    |                          |                            |                              |                                |                                |                    |
| Kno                                  | own or pred                       | icted distributi         | on in environmen           | ital compart                 | ments:                         |                                |                    |
| No                                   | information                       | n available              |                            |                              |                                |                                |                    |
| Sur                                  | face tensior                      | າ:                       |                            |                              |                                |                                |                    |
|                                      | Value                             | °C                       | Concentratio               | n                            | Method                         |                                | Note               |
|                                      |                                   |                          | No informatio available    | No information ava           |                                | lable -                        | -                  |
|                                      |                                   |                          |                            |                              |                                |                                |                    |
| Ads                                  | sorption / d                      | esorption                |                            |                              |                                |                                |                    |
| Transport                            |                                   | oefficient<br>s constant | log Kow                    | Evapor                       | ation rate                     | Method                         | Note               |
| Soil-water                           | No<br>available                   | information              | No information available   |                              |                                | No<br>information<br>available | -                  |
| Water-air                            | ater-air No information available |                          | No information available   | n No information available   |                                | No<br>information<br>available | -                  |
| Soil-air No information available    |                                   | No information available | n No information available |                              | No<br>information              | _                              |                    |



Trading name:

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**ALCIAN BLUE SOLUTION pH 2.5** 

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| Produ   | ıct code:               | AB10-OT-X**               | Date of compilation: 21 Dec 2022 Version: 4  |
|---------|-------------------------|---------------------------|--|
|         | according               |                           | t contain components considered to have endocrine disrupting properties or Commission Delegated regulation (EU) 2017/2100 or Commission els of 0.1% or higher. |
| 12.7.   | Other ad                | verse effects             |  |
|         | No inforr               | mation available          |  |
|         |                         |                           |  |
| SECTION | ON 13. Dis <sub>l</sub> | posal considerations      |  |
| 13.1.   | Waste                   | treatment methods         |  |
|         |                         |                           |  |
| 13.1.1. |                         | t/Packaging disposal:     |  |
|         | Submit<br>Protect       |                           | al person authorized by the Ministry of Environmental and Nature   |
|         |                         |                           |  |
| 13.1.2. |                         | codes/waste designation   | ons according to Law:  |
|         | No info                 | ormation available        |  |
|         |                         |                           |  |
| 13.1.3. |                         | treatment – relevant in   | formation:   |
|         | No info                 | ormation available        |  |
| 10.1.1  |                         |                           |  |
| 13.1.4. |                         | e disposal – relevant inf |  |
|         | vvaste                  | must not be disposed (    | of into the sewage system.   |
| 13.1.5. | Othor                   | disposal recommendati     | one:   |
| 13.1.3. |                         | •                         | t's remains into the sewage system. Submit the remains to the collectors   |
|         | authori<br>the pac      | zed by the ministry in o  | charge. Do not dispose of the packaging into the sewage system. Submit is authorized by the ministry in charge. Do not dispose of in places where              |
| 13.1.6. | Relevar                 | nt Community provision    | ns:  |
|         | -                       |                           |  |
|         |                         |                           |  |
| SECTION |                         | nsport information        |  |
|         |                         | ting/shipment by road     |  |
| UN nu   |                         |                           | Not subject to transport regulations.  |
|         | oper shippii            |                           | -  |
|         | ort hazard              | class(es):                | -  |
| Packin  | g group:                |                           | -  |



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| Environmentally hazardous:   | -   |
|--|---|
| Special precautions for user:  | -   |
| Transporting/shipment by rail (R   |   |
| UN number:   | Not subject to transport regulations.   |
| UN proper shipping name:   | -   |
| Transport hazard class(es):  | _   |
| Packing group:   | _   |
| Environmentally hazardous:   | -   |
| Special precautions for user:  | -   |
| Inland waterway transport (ADN   | )   |
| UN number:   | Not subject to transport regulations.   |
| UN proper shipping name:   | -   |
| Transport hazard class(es):  | -   |
| Packing group:   | -   |
| Environmentally hazardous:   | -   |
| Special precautions for user:  | -   |
| Transporting/shipment by sea (II   | MDG)  |
| Transporting/simplifient by sea (ii  | NIEG,   |
| UN number:   | Not subject to transport regulations.   |
|  |   |
| UN number:   | Not subject to transport regulations.   |
| UN number: UN proper shipping name:  | Not subject to transport regulations.   |
| UN number: UN proper shipping name: Transport hazard class(es):  | Not subject to transport regulations  |
| UN number: UN proper shipping name: Transport hazard class(es): Packing group:   | Not subject to transport regulations.   |
| UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous:  | Not subject to transport regulations.   |
| UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous:  Special precautions for user:   | Not subject to transport regulations.   |
| UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous:  Special precautions for user:  Transporting/shipment by air (IC)  | Not subject to transport regulations.  AO-TI/IATA-DGR)  |
| UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous:  Special precautions for user:  Transporting/shipment by air (IC)  UN number:  | Not subject to transport regulations.  Not subject to transport regulations.  |
| UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous:  Special precautions for user:  Transporting/shipment by air (IC)  UN number:  UN proper shipping name:  | Not subject to transport regulations.  Not subject to transport regulations.  AO-TI/IATA-DGR)  Not subject to transport regulations |
| UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous:  Special precautions for user:  Transporting/shipment by air (IC)  UN number:  UN proper shipping name:  Transport hazard class(es):   | Not subject to transport regulations.  Not subject to transport regulations.  AO-TI/IATA-DGR)  Not subject to transport regulations |
| UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous:  Special precautions for user:  Transporting/shipment by air (ICUN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:                                | Not subject to transport regulations.  Not subject to transport regulations   |
| UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous:  Special precautions for user:  Transporting/shipment by air (IC)  UN number:  UN proper shipping name:  Transport hazard class(es):  Packing group:  Environmentally hazardous: | Not subject to transport regulations.  Not subject to transport regulations   |

#### **SECTION 15. Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture



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|       | EU regulations                      |  |
|-------|-------------------------------------|--|
|       | Authorization and/or rest           | rictions of use  |
|       | Authorizations:                     | -  |
|       | Restrictions:                       | -  |
|       | Other EU regulations:               | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances mixtures and articles (Appear XVIII): |
|       |                                     | dangerous substances, mixtures and articles (Annex XVII);  |
|       | Information according 19 guideline) | 99/13/EC about limitation of emissions of volatile organic compounds (VOC-   |
|       | National legislation:               | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act  |
| 15.2. | Chemical safety assessme            | ent  |
|       | None                                |  |

| SECTION 16. Other information |   |
|-------------------------------|---|
| 16.1. Indication of changes:  | - |



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| Trading name: | ALCIAN BLUE SOLUTION pH 2.5 |                      |             |            |
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| 16.2.    | Abbreviations and acronyms:                   | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative |  |  |
|----------|---|---|--|--|
| 16.3.    | Key literature references and source of data: | -   |  |  |
| 16.4.    | Classification and procedure 1272/2008 (CLP)  | used to derive the classification for mixture according to Regulation (EC)  |  |  |
| Classifi | cation  | Classification procedure  |  |  |
| -        |   | -   |  |  |
| 16.5.    | Relevant H statements (numb                   | per and full text)  |  |  |
|          | H: 226  | Flamamble liquid and vapour.  |  |  |
|          | 314   | Causes severe skin burns and eye damage.  |  |  |
| 16.6.    | Training advice:                              | -   |  |  |
| 16.7.    | Further information:                          | ** "X" in the product code marks different volumes (different packagings of the product)  We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.   |  |  |

#### ANNEX:

**Exposure scenario resulting to Chemical safety assessment** 

-



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| Trading name: | BIOSCHIFF REAGENT |                      |             |          |   |
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| Product code: | BS-OT-X**         | Date of compilation: | 21 Dec 2022 | Version: | 4 |

| SECTI | ON 1: Identification of t               | he substance   | e/mixture  | and of the company/undertaking          |  |
|-------|---|----------------|--|---|--|
| 1.1   | Product identifier                      |                |  |   |  |
|       | Trading name:                           | BIOSCHIFF      | REAGENT  |   |  |
|       | Chemical name:                          | -              |  |   |  |
|       | Catalogue number:                       | BS-OT-X**      |  |   |  |
| 1.2   | Relevant identified use                 | es of the subs | tance or n   | nixture and uses advised against        |  |
|       | Uses:                                   |                | For dete   | ecting aldehydes and mucous substances. |  |
|       | Uses advised against:                   |                | Only the   | e identified uses are advised.          |  |
|       | Reason why uses advis                   | sed against:   | The product is intended for use only as an <i>in vitro</i> diagnost medical device, registered at the Agency for Medicinal Proc Medical Devices and there is no reason to use it for other p |   |  |
| 1.3   | Details of the supplier                 | of the safety  | data shee  | t                                       |  |
|       | Supplier:                               |                | BioGnost Ltd.  |   |  |
|       | Address:                                |                | Medjugorska 59, Zagreb<br>+385 1 2409997<br>+385 1 2404039<br>msds@biognost.hr   |   |  |
|       | Telephone number:                       |                |  |   |  |
|       | Telefax.:                               |                |  |   |  |
|       | e-mail of competent p                   | erson:         |  |   |  |
|       | National contact:                       |                | -  |   |  |
| 1.4   | Emergency telephone                     | number         |  |   |  |
|       | National Protection an                  | d Rescue Dire  | ectorate:  | 112                                     |  |
|       | Medical information: Other information: |                |  | +385 1 2348 342                         |  |
|       |   |                |  | -                                       |  |

| SECTIO  | TION 2. Hazards identification  |  |                     |  |  |  |
|---------|---------------------------------|--|---------------------|--|--|--|
| 2.1     | Classification of the substan   | Classification of the substance or mixture |                     |  |  |  |
| 2.1.1   | Classification according to F   | Regulation (EC) No 1                       | 1272/2008 (CLP)     |  |  |  |
|         | Hazard class and ca             | egory code:                                | Hazard statements*: |  |  |  |
|         | -                               |  | EUH031              |  |  |  |
| 2.1.2.  | Additional information          |  |                     |  |  |  |
|         | -                               | -  |                     |  |  |  |
| *For fu | ıll text of Hazard- and EU Haza | rd-statements: see                         | SECTION 16          |  |  |  |
| 2.2     | Label elements                  |  |                     |  |  |  |
|         | Product identification:         | BIOSCHIFF REA                              | AGENT               |  |  |  |
|         | Identification number:          | ion number: -                              |                     |  |  |  |
|         | Authorization number: -         |  |                     |  |  |  |
|         | Hazard pictograms:              | -  |                     |  |  |  |



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|     | Signal word:   | -   |  |  |
|-----|--|---|--|--|
|     | Hazard statements:   | EUH031 Contact with acids liberates toxic gas.      |  |  |
|     | Precautionary statements:  | P281 Use personal protective equipment as required. |  |  |
|     | Supplemetal hazard information (EU):   | -   |  |  |
| 2.3 | Other hazards  |   |  |  |
|     | <b>Endocrine Disrupting Prope</b>  | rties:  |  |  |
|     | No known endocrine disrupting properties <b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance PBT or a vPvB. |   |  |  |
|     |  |   |  |  |

| SECTION 3. Cor                           | SECTION 3. Composition/information on ingredients |                                |                             |  |  |  |  |  |
|--|---|--------------------------------|-----------------------------|--|--|--|--|--|
| CAS/<br>EC/<br>Index number              | REACH Registration<br>No                          | Weight % content<br>(or range) | Identification name         | Classification according to<br>Regulation (EC) No<br>1272/2008 (CLP) |  |  |  |  |
| 7681-57-4/<br>231-673-0/<br>016-063-00-2 | -   | 1 – 3 %                        | sodium metabisulfite        | Acute Tox. 4; H302<br>Eye Dam. 1; H318<br>EUH031                     |  |  |  |  |
| 7647-01-0/<br>231-595-7/<br>017-002-01-X | -   | 0.7 – 1 %                      | hydrochloric acid,<br>36.5% | Skin Corr. 1B; H314<br>Acute Tox. 3; H331                            |  |  |  |  |

| SECT | CTION 4. First aid measures                                 |   |  |  |  |
|------|---|---|--|--|--|
| 4.1  | Description of first aid measures                           |   |  |  |  |
|      | General notes:  | If the suggested first aid measures do not prove sufficient, seek medical attention.  |  |  |  |
|      | Following inhalation:                                       | Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.                         |  |  |  |
|      | Following skin contact:                                     | Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.  |  |  |  |
|      | Following eye contact:                                      | Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.   |  |  |  |
|      | Following ingestion:  | Rinse the oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital. |  |  |  |
|      | Self-protection of the first aider:                         | -   |  |  |  |
| 4.2  | Most important symptoms and effects, both acute and delayed |   |  |  |  |



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|     | Following inhalation:             | Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.                                 |
|-----|-----------------------------------|---|
|     | Following skin contact:           | Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.                       |
|     | Following eye contact:            | Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.                                 |
|     | Following ingestion:              | Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting. |
| 4.3 | Indication of any immediate media | cal attention and special treatment needed  |
|     | -                                 |   |

| SECTIO | ON 5. Firefighting measures          |   |
|--------|--------------------------------------|---|
| 5.1    | Extinguishing media                  |   |
|        | Suitable extinguishing media:        | Small fire - water spray, dry powder, CO <sub>2</sub><br>Large fire - water spray or alcohol-resistant foam |
|        | Unsuitable extinguishing media:      | Water jet   |
| 5.2    | Special hazards arising from the su  | ubstance or mixture   |
|        | Hazardous combustion products:       | Sulfur oxides.  |
| 5.3    | Advice for firefighters              |   |
|        | Use a self-contained open-circuit of | compressed air breathing apparatus and fireproof clothing.  |
| 5.4    | Additional information               |   |
|        | Do not contaminate the environment   | ent with extinguishing media.   |

| SECTIO | ON 6. Accidental release measur                                    | res  |
|--------|--|--|
| 6.1    | Personal precautions, protective                                   | equipment and emergency procedures   |
| 6.1.1. | For non-emergency personnel  |  |
|        | Protective equipment:  | Use personal protective equipment (see Section 8).   |
|        | Accident prevention methods:                                       | Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. |
|        | Emergency procedures:  | Mark the area using proper signs.  |
| 6.1.2. | For emergency responders:  |  |
|        | Use protective equipment; in ca (see Section 8).                   | se of inadequate ventilation use adequate airways protective equipment   |
| 6.2    | Environmental precautions:   |  |
|        | Do not dispose of in sewage, dr<br>Protection and Rescue Directora | ainage system and waterways. In case of large spillage contact National ate (NPRD) on 112.   |



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| 6.3    | Methods and material for cor                     | ntainment and cleaning up   |
|--------|--|---|
| 6.3.1. | Bunding, covering of drains; capping procedures: | Sand or clay barriers.  |
| 6.3.2. | Cleaning up:                                     | Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water. |
| 6.3.3. | Other information:                               | Do not use incompatible materials (see Section 10).   |
| 6.4    | Reference to other sections                      |   |
|        | See Section 7 for information                    | on safe handling.   |
|        | See Section 8 for information                    | on personal protective equipment.   |
|        | See Section 13 for disposal in                   | formation.  |

| SECTIO | ON 7. Handling and storage                       |                           |   |
|--------|--|---------------------------|---|
| 7.1    | Precautions for safe handling                    |                           |   |
| 7.1.1. | Protection measures                              |                           |   |
|        | Measures to prevent fire:                        |                           | Use in well ventilated storage rooms.   |
|        | Measures to prevent aerosol and dust generation  | n:                        | Secure proper ventilation.  |
|        | Measures to protect the environment:             |                           | Prevent spilling into the sewage system and waterways.  |
|        | Other measures:                                  |                           | -   |
| 7.1.2. | Advice on general occupational hygiene:          |                           |   |
|        | Do not eat, drink or smoke in the workspace. Th  | oroughly was              | sh hands after work and before eating.  |
| 7.2    | Conditions for safe storage, including any incom | npatibilities             |   |
|        | Technical measures and storage conditions:       |                           | htly closed and upright set containers in a atted storage rooms at temperatures ranging 25 °C.                                      |
|        | Packaging materials:                             | Manufactu<br>containers   | ırer's original packaging. Avoid metal  |
|        | Requirements for storage rooms and vessels:      | Keep away<br>tightly clos | r from food and drink. Keep the containers sed.   |
|        | Advices for storage equipment:                   | must be re                | e must be made of hard material; floors esistant to chemicals. There must be no drain ly leads into sewage system. Secure proper in |



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|     | Further information on storage conditions: | Do not place the unused material in the storage room<br>and do not use empty containers for storing other<br>chemicals. Do not store with incompatible materials<br>(see Section 10). |
|-----|--|---|
| 7.3 | Specific end use(s)                        |   |
|     | Recommendations:                           | -   |
|     | Industrial sector specific solutions:      | -   |

| 8.1 Control p        | arameters   |             |          |              |           |                                 |                          |
|----------------------|-------------|-------------|----------|--------------|-----------|---------------------------------|--------------------------|
| Substance            | 2           | CA          | S No     |              | •         | exposure limit<br>t term values | Biological limit values  |
| Substance            |             |             |          | F            | ppm       | mg/m³                           | g                        |
| sodium metabisulf    | ite         | 7681-57     | 7-4      |              | -/-       | 5/-                             | No information available |
| Substance name:      |             |             |          |              |           |                                 |                          |
| EC No:               | _           | CAS No      | ):       |              |           |                                 |                          |
| DNEL                 | ***         |             | <u> </u> |              |           | - <b>I</b>                      |                          |
|                      |             |             |          | Ind          | lustrial  |                                 |                          |
| Route of             | Acı         | ıte         |          | Acute        |           | Chronic                         | Chronic                  |
| exposure:            | effect      | local       | effe     | ct system    | iic       | effect local                    | effect systemic          |
| Oral                 | -           |             | -        |              | -         |                                 | -                        |
| Inhalation           | -           |             | -        |              | -         |                                 | -                        |
| Dermal               | -           |             | -        |              | -         |                                 | -                        |
| Critical physical pa | rameters: s | solubility, | flamma   | bility, cori | rosivity: | -                               |                          |
|                      | _           |             | •        | Cor          | nsumer    |                                 |                          |
| Route of             | Ac          |             |          | Acute        |           | Chronic                         | Chronic                  |
| exposure:            | effect      | local       | effe     | ct system    | nic       | effect local                    | effect systemic          |
| Oral                 | -           |             | -        |              | -         |                                 | -                        |
| Inhalation           | -           |             | -        |              | -         |                                 | -                        |
| Dermal               | -           |             | -        |              | -         |                                 | -                        |
| PNEC                 |             |             |          |              |           |                                 |                          |
| Environmental pro    | tection tar | get         |          |              | PNEC      |                                 |                          |
| Fresh water          |             |             |          |              |           | mation available                |                          |
| Freshwater sedime    | nts         |             |          |              |           | mation available                |                          |
| Marine water         |             |             |          |              | No infor  | mation available                |                          |
| Marine sediments     |             |             |          |              | No infor  | mation available                |                          |



Food chain

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No information available

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|             | **   |                 |   |
|-------------|--|-----------------|---|
| Microorga   | anisms in sewage treatment   |                 | No information available  |
| Soil (agric | cultural)  |                 | No information available  |
| Air         |  |                 | No information available  |
|             |  |                 |   |
|             |  |                 |   |
| 8.2         | Exposure controls  |                 |   |
| 8.2.1.      | Appropriate engineering controls                                     | 5               |   |
|             | Substance/mixture related measure prevent exposure during identified |                 | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.   |
|             | Structural measures to prevent exposure:                             |                 | In accordance with Section 7.   |
|             | Organisational measures to preve exposure:                           | ent             | Organization of work in order to reduce other worker's influence during work process.   |
|             | Technical measures to prevent ex                                     | cposure:        | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.                          |
| 8.2.2.      | Personal protection equipment  |                 |   |
| 8.2.2.1.    | Eye and face protection:   | levels o        | glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air. |
| 8.2.2.2.    | Skin protection  | i               |   |
|             | Hand protection:   | Protect         | tive nitrile gloves, 0.11 mm thick (EN 374).  |
|             | Other skin protection:   |                 | ntistatic clothing made of natural fibers (such as cotton) ng sleeves (EN 340) and shoes that cover the entire foot.  |
| 8.2.2.3.    | Respiratory protection:  | combir          | e mask (EN 136) or half mask (EN 140) equipped with a ned "A1 + Form" filter (EN 143) used when concentration exceed GVI.   |
| 8.2.2.4.    | Thermal hazards:   | No info         | ormation available  |
| 8.2.3.      | Environmental exposure controls                                      |                 |   |
|             | Substance/mixture related measures to prevent exposure:              | See Se          | ction 6   |
|             | Structural measures to prevent exposure:                             | Use mo          | odern equipment.  |
|             | Organisational measures to prevent exposure:                         | Adapt<br>workpl | the work process to the required working conditions of the ace.   |
|             | Technical measures to prevent exposure:                              | See Se          | ction 6   |



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| Information on basic physical and                         | chemical properties            |                          |
|---|--------------------------------|--------------------------|
|   | Value                          | Method                   |
| Physical state:   | liquid                         | No information available |
| Colour:   | colourless                     | No information available |
| Odour/odour threshold:                                    | sharp/no information available | No information available |
| Melting point / freezing point:                           | No information available       | No information available |
| Boiling point or initial boiling point and boiling range: | No information available       | No information available |
| Flammability:   | No information available       | No information available |
| Lover and upper explosion limit:                          | No information available       | No information available |
| Flash point:  | No information available       | No information available |
| Auto-ignition temperature:                                | No information available       | No information available |
| Decomposition temperature:                                | No information available       | No information available |
| рН:   | <2                             | No information available |
| Kinematic viscosity:                                      | No information available       | No information available |
| Solubility:   | No information available       | No information available |
| Partition coefficient n-<br>octanol/water (log value):    | No information available       | No information available |
| Vapour pressure:  | No information available       | No information available |
| Density and/or relative density                           | No information available       | No information available |
| Relative vapour density:                                  | No information available       | No information available |
| Particle characteristics:                                 | No information available       | No information available |

| SECTIO | SECTION 10. Stability and reactivity |  |  |  |  |  |  |
|--------|--------------------------------------|--|--|--|--|--|--|
| 10.1   | Reactivity:                          | No information available   |  |  |  |  |  |
| 10.2   | Chemical stability:                  | The product is chemically stable under standard ambient conditions of storing and using. |  |  |  |  |  |
| 10.3   | Possibility of hazardous reactions:  | No information available   |  |  |  |  |  |
| 10.4   | Conditions to avoid:                 | No information available   |  |  |  |  |  |
| 10.5   | Incompatible materials:              | Strong oxidants (acids).   |  |  |  |  |  |
| 10.6   | Hazardous decomposition products:    | Sulfur dioxide, sodium oxide.  |  |  |  |  |  |



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| 11.1 Information                      | on toxico      | logical effects     |                            |   |            |            |              |  |
|---------------------------------------|----------------|---------------------|----------------------------|---|------------|------------|--------------|--|
| Acute toxic                           | ity:           |                     |                            |   |            |            |              |  |
| Route of exposure:                    | Method Species |                     | Γ                          | Pose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mix</sub> | Exposure   | e time Res |              |  |
| Oral:                                 | -              | -                   | No information - available |   |            |            | -            |  |
| Dermal:                               | -              | -                   | _                          | information<br>lable  | -          |            | -            |  |
| Inhalation:                           | -              | -                   |                            | information<br>lable  | -          |            | -            |  |
| Specific targ                         | get organ      | toxicity – single e | xposure (S                 | TOT SE):  |            |            |              |  |
| -                                     |                | Specific effects    |                            | Target o  | rgan       |            | Note         |  |
| Oral:                                 | No inform      | nation available    |                            | No information a  | vailable   | -          |              |  |
| Dermal:                               | No inforr      | nation available    |                            | No information a  | vailable   | -          |              |  |
| Inhalation:                           | No inform      | nation available    |                            | No information available                                      |            |            | -            |  |
| Aspiration h                          | nazard:        |                     | No inform                  | mation available.   |            |            |              |  |
| <u> </u>                              |                |                     |                            |   |            |            |              |  |
| Irritation an                         | nd corrosic    | on                  |                            |   |            |            |              |  |
| ī                                     | E>             | posure time         | Spec                       | ies Evaluatio   | n Method   |            | Note         |  |
| Skin corrosion/irritation:            | -              |                     | -                          | -   | -          | -          |              |  |
| Serious eye<br>damage/irritation      | -              |                     | -                          | -   | -          | -          |              |  |
| Sensitizatio                          | n              |                     |                            |   |            |            |              |  |
| Skin sensitization:  No information a |                |                     | available                  |   |            |            |              |  |
| Respiratory sensitiza                 | ition:         | No information av   | vailable                   |   |            |            |              |  |
|                                       |                |                     |                            |   |            |            |              |  |
| Symptoms                              | related to     | the physical, cher  | nical and t                | oxicological charac   | cteristics |            |              |  |
| Oral ava a sura                       | May ca         | ause gastrointestir | nal irritatio              | n accompanied by  |            | ins and    | cramps; high |  |
| Oral exposure:                        | levels (       | of concentration r  | may induce                 | e vomiting and dia  | rhea.      |            |              |  |



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| Inhalation exposi     | ure:                     | exposure and       |                                | y sensitive pers               | high levels of co<br>ons bronchospa |                                | prolonged<br>Ir, as well as asthma |
|-----------------------|--------------------------|--------------------|--------------------------------|--------------------------------|-------------------------------------|--------------------------------|------------------------------------|
| Eye exposure:         |                          | May cause ey       | ye irritation.                 |                                |                                     |                                |                                    |
| Repeate               | nd dose                  | toxicity (sub      | acute, subchro                 | onic chronic)                  |                                     |                                |                                    |
| Породи                |                          | Dose               | Exposure time                  | Species                        | Method                              | Evaluation                     | n Note                             |
| Subacute oral         | No<br>availa             | information<br>ble | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>informatio<br>available  | on -                               |
| Subacute<br>dermal    | No<br>availa             | information<br>ble | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>informatio<br>available  | on -                               |
| Subacute inhalation   | No information available |                    | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>information<br>available | on -                               |
| Subchronic oral       | No information available |                    | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>informatio<br>available  | on -                               |
| Subchronic<br>dermal  | No<br>availa             | information<br>ble | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>informatio<br>available  | on -                               |
| Subchronic inhalation | No<br>availa             | information<br>ble | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>information              | on -                               |
| Chronic oral          | No<br>availa             | information<br>ble | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>information<br>available | on -                               |
| Chronic dermal        | No<br>availa             | information<br>ble | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>informatio<br>available  | on -                               |
| Chronic<br>inhalation | No information available |                    | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available      | No<br>information<br>available | on -                               |
| - · · ·               |                          |                    |                                | (6707                          | DE).                                |                                |                                    |
| Specific              | target                   | organ toxicit      |                                | xposure (STOT                  |                                     | raan                           | Note                               |
| Subacute oral         |                          | No informa         | Specific effection available   | .15                            | Target o                            |                                | Note -                             |
| Subacute dermal       |                          |                    | tion available                 |                                | No information                      |                                | -                                  |
| Subacute inhalat      |                          |                    | tion available                 |                                | No information                      |                                | _                                  |



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| Subchronic oral      | No information available                     |                          | No information available | - |  |  |  |
|----------------------|--|--------------------------|--------------------------|---|--|--|--|
| Subchronic dermal    | No information available                     |                          | No information available | - |  |  |  |
| Subchronic inhalatio | nhalation No information available           |                          | No information available | - |  |  |  |
| Chronic oral         | No information available                     |                          | No information available | - |  |  |  |
| Chronic dermal       | No information available                     |                          | No information available | - |  |  |  |
| Chronic inhalation   | No information available                     |                          | No information available | - |  |  |  |
| CMR effects          | (carcinogenicity; mutagenicity; re           | eproductive t            | oxicity)                 |   |  |  |  |
| Carcinogen           | city:  | No informa               | tion available           |   |  |  |  |
| Mutagenicit          | y in vitro:                                  | No informa               | No information available |   |  |  |  |
| Genotoxicit          | Genotoxicity:                                |                          | No information available |   |  |  |  |
| Mutagenicit          | y in vivo:                                   | No information available |                          |   |  |  |  |
| Germ cell m          | utagenicity:                                 | No information available |                          |   |  |  |  |
| Reproductiv          | e toxicity:                                  | No informa               | tion available           |   |  |  |  |
| Summary properties:  | of evaluation of the CMR                     | No informa               | tion available           |   |  |  |  |
| 11.2 Information     | on other hazards:                            |                          |                          |   |  |  |  |
| 11.2.1. Endocrine d  | isrupting properties:                        |                          |                          |   |  |  |  |
|                      | endocrine disrupting properties uman health. |                          |                          |   |  |  |  |
| 11.2.2. Other inform | nations:                                     |                          |                          |   |  |  |  |
| _                    |  |                          |                          |   |  |  |  |

| SECTION 12. Ecologic        | SECTION 12. Ecological information |                  |                          |                                |                                |      |  |  |  |
|-----------------------------|------------------------------------|------------------|--------------------------|--------------------------------|--------------------------------|------|--|--|--|
| 12.1 Toxicity               |                                    |                  |                          |                                |                                |      |  |  |  |
| Acute (short-term) toxicity | Dose                               | Exposure<br>time | Species                  | Method                         | Evaluation                     | Note |  |  |  |
| Fish                        | LC <sub>50</sub>                   | 96 hours         | No information available | No<br>information<br>available | No<br>information<br>available | -    |  |  |  |
| Crustacea:                  | EC <sub>50</sub>                   | 48 hours         | No information available | No<br>information<br>available | No<br>information<br>available | -    |  |  |  |
| Algae/aquatic plants        | IC <sub>50</sub>                   | 4 days           | No information available | No information available       | No<br>information<br>available | -    |  |  |  |



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| Trading name: |           | BIOSCHIFF REAGENT    |             |          |   |  |  |
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| Other of                        | organisms       |        | -                | -   | -                        |                          | -                              | -                      |                | -    |
|---------------------------------|-----------------|--------|------------------|---|--------------------------|--------------------------|--------------------------------|------------------------|----------------|------|
| Chronic (long-term)<br>toxicity |                 | Dose   | Exposur<br>time  | e   | Species                  | Method                   | Eva                            | aluation               | Note           |      |
| Fish                            |                 |        | LC <sub>50</sub> | 96 hours  |                          | o information<br>ailable | No<br>information<br>available | No<br>inforr<br>availa | mation<br>Ible | -    |
| Crustad                         | cea:            |        | EC <sub>50</sub> | 48 hours  |                          | o information<br>ailable | No<br>information<br>available | No<br>inforr<br>availa | mation<br>Ible | -    |
| Algae/                          | aquatic pla     | ints   | IC <sub>50</sub> | 72 hours  |                          | o information<br>ailable | No<br>information<br>available | No<br>inforr<br>availa | mation<br>Ible | -    |
| Other o                         | Other organisms |        | -                | -   |                          | -                        | -                              |                        | -              |      |
|                                 |                 |        |                  |   |                          |                          |                                |                        |                |      |
| 12.2                            | Persister       | nce ar | nd degradal      | oility  |                          |                          |                                |                        |                |      |
|                                 | Abiotic o       | degra  | dation           |   | :                        |                          | ,                              |                        | :              |      |
|                                 |                 | De     | gradation h      | alf-lives   |                          | Method                   | Evaluati                       | on                     |                | Note |
| Marine                          | water           | No in  | formation a      | available   | No information available |                          | No information available       |                        | -              |      |
| Fresh v                         | vater           | No in  | formation a      | formation available  No information available  No information available |                          | -                        |                                |                        |                |      |
| Air                             |                 | No in  | formation a      | available   | No in<br>availa          | formation<br>able        | No informati<br>available      | on                     | -              |      |
| Soil No information available   |                 | No in  | formation        | on No information available   |                          | _                        |                                |                        |                |      |

| Biodegradation           |                          |                          |                          |                          |  |  |  |  |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|--|--|--|
| % Degradation            | Time (days)              | Method                   | Evaluation               | Note                     |  |  |  |  |
| No information available |  |  |  |  |

| 12.3  | Bioaccumulative potential                     |   |   |   |            |      |  |  |  |
|-------|---|---|---|---|------------|------|--|--|--|
|       | Octanol-water partition coefficient (log Kow) |   |   |   |            |      |  |  |  |
| Value | Value Concentration pH °C Method Evaluation   |   |   |   | Evaluation | Note |  |  |  |
| -     | -   | - | - | - | -          | -    |  |  |  |
|       |   |   |   |   |            |      |  |  |  |



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| Trading name:              |                            |              |                            |                       |                     | BIO                    | SCHIF                 | FREAG                                   | ENT             |                      |                |          |     |
|----------------------------|----------------------------|--------------|----------------------------|-----------------------|---------------------|------------------------|-----------------------|---|-----------------|----------------------|----------------|----------|-----|
| Product co                 | ode:                       | BS-O         | T-X**                      |                       | Date                | of co                  | mpilati               | on:                                     | 21 De           | c 202                | 2              | Version: | 4   |
|                            |                            |              |                            |                       |                     |                        |                       | 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 |                 |                      |                |          |     |
| Bio                        | oconcent                   | ration       | factor (BCF)               |                       |                     |                        |                       |   |                 |                      |                |          |     |
| Value                      |                            |              | Species                    |                       | M                   | lethod                 | l                     | E                                       | /aluatio        | on                   |                | Note     |     |
| No informa<br>available    | ation                      | No<br>availa | inform<br>ble              | ation                 | No infor            |                        | n                     | No info                                 |                 | on                   | -              |          |     |
| Ch                         | nronic eco                 | otoxici      | ty                         |                       |                     |                        |                       | ,                                       |                 |                      | ·              |          |     |
| V                          | /alue                      |              | Dose                       |                       | osure<br>ime        | Spe                    | ecies                 | Meth                                    | nod             | Eva                  | luation        | N        | ote |
| Chronic tox                | kicity on f                | fish         | LC <sub>50</sub>           | No<br>infor<br>availa | mation<br>able      | No<br>inforr<br>availa | mation<br>Ible        | No<br>inform<br>availab                 |                 | No<br>infor<br>avail | mation<br>able | -        |     |
| Chronic tox<br>crustacea ( | -                          |              | EC <sub>50</sub>           | No<br>infor<br>availa | mation<br>able      | No<br>inforr<br>availa | mation<br>lble        | No<br>inform<br>availab                 |                 | No<br>infor<br>avail | mation<br>able | -        |     |
| 12.4 M                     | obility in                 | soil         |                            |                       |                     |                        |                       |   |                 |                      |                |          |     |
| Kr                         | nown or p                  | oredict      | ed distributi              | on in e               | environme           | ental c                | ompart                | ments:                                  |                 |                      |                |          |     |
|                            | o informa                  |              | vailable                   |                       |                     |                        |                       |   |                 |                      |                |          |     |
| Su                         | ırface ten                 | sion:        |                            |                       |                     |                        |                       |   |                 |                      |                |          |     |
|                            | Value                      |              | °C                         | C                     | oncentrat           | ion                    | 0<br>0<br>0<br>0<br>0 | Metho                                   | od              |                      |                | Note     |     |
|                            | o<br>formatior<br>railable |              | o<br>formation<br>vailable |                       | informat<br>iilable | ion                    | No inf<br>availal     | ormatio<br>ole                          | n<br>           |                      | _              |          |     |
|                            |                            |              |                            |                       |                     |                        |                       |   |                 |                      |                |          |     |
| Ac                         | dsorption                  |              | •                          |                       |                     |                        |                       |   | ***             |                      | -              |          |     |
| Transport                  | · ·                        |              | fficient<br>constant       | lc                    | og Kow              | Eν                     | /aporati              | on rate                                 |                 | Metho                | d              | No       | te  |
| Soil-water                 | No<br>availa               |              | nformation                 | No ir<br>availa       | nformatio<br>able   |                        | o inform<br>ailable   | nation                                  | No ir<br>availa | nforma<br>able       | ation          | -        |     |
| Water-air                  | No<br>availa               |              | nformation                 | No ir<br>availa       | nformatio<br>able   |                        | o inform<br>ailable   | nation                                  | No ir<br>availa | nforma<br>able       | ation          | -        |     |



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| Soil-air | No information available  | n No information available | No information available | No information available | -                |  |  |
|----------|---|----------------------------|--------------------------|--------------------------|------------------|--|--|
| 12.5.    | Results of PBT and vPvB ass   | sessment                   |                          |                          |                  |  |  |
|          | Substance(s) in the mixture   |                            | criteria for PBT or      | vPvB                     |                  |  |  |
|          | · · · · · · · · · · · · · · · · · · ·   |                            |                          |                          |                  |  |  |
| 12.6.    | Endocrine disrupting prope  | rties                      |                          |                          |                  |  |  |
|          | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |                            |                          |                          |                  |  |  |
| 12.7.    | Other adverse effects   |                            |                          |                          |                  |  |  |
|          | No information available  |                            |                          |                          |                  |  |  |
|          |   |                            |                          |                          |                  |  |  |
| SECTIO   | N 13. Disposal consideration  | ons                        |                          |                          |                  |  |  |
| 13.1     | Waste treatment method  | s                          |                          |                          |                  |  |  |
|          |   |                            |                          |                          |                  |  |  |
| 13.1.1.  | Product/Packaging dispo   | sal:                       |                          |                          |                  |  |  |
|          | Submit for disposal to the Protection.  | e legal person autho       | rized by the Minist      | ry of Environmental      | and Nature       |  |  |
| 13.1.2.  | Waste codes/waste desig   | nations according to       | Law:                     |                          |                  |  |  |
|          | Packaging that contains r   | esidual hazardous sı       | ubstances or is con      | taminated with haza      | rdous substances |  |  |
| 13.1.3.  | Waste treatment – releva  | nt information:            |                          |                          |                  |  |  |
|          | No information available  |                            |                          |                          |                  |  |  |
| 13.1.4.  | Sewage disposal – releva  | nt information:            |                          |                          |                  |  |  |
|          | Waste must not be dispo   | sed of into the sewa       | ge system.               |                          |                  |  |  |
| 13.1.5.  | Other disposal recommer   | ndations:                  |                          |                          |                  |  |  |
|          | Do not dispose of the pro<br>authorized by the ministr<br>the packaging to the coll   | y in charge. Do not o      | dispose of the pack      | aging into the sewa      |                  |  |  |
| 13.1.6.  | Relevant Community pro  | vicione:                   |                          |                          |                  |  |  |
| 15.1.0.  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   | VISIONS.                   |                          |                          |                  |  |  |



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| SECTION 14. Transport information   |                                      |
|---|--------------------------------------|
| Transporting/shipment by road (   | ADR)                                 |
| UN number:  | Not subject to transport regulations |
| UN proper shipping name:  | -                                    |
| Transport hazard class(es):   | -                                    |
| Packing group:  | -                                    |
| Environmentally hazardous:  | -                                    |
| Special precautions for user:   | -                                    |
| Transporting/shipment by rail (R  | ID)                                  |
| UN number:  | Not subject to transport regulations |
| UN proper shipping name:  | -                                    |
| Transport hazard class(es):   | -                                    |
| Packing group:  | -                                    |
| Environmentally hazardous:  | -                                    |
| Special precautions for user:   | -                                    |
| Inland waterway transport (ADN)   |                                      |
| UN number:  | Not subject to transport regulations |
| UN proper shipping name:  | -                                    |
| Transport hazard class(es):   | -                                    |
| Packing group:  | -                                    |
| Environmentally hazardous:  | -                                    |
| Special precautions for user:   | -                                    |
| Transporting/shipment by sea (II  | MDG)                                 |
| UN number:  | Not subject to transport regulations |
| UN proper shipping name:  | -                                    |
| Transport hazard class(es):   | -                                    |
| Packing group:  | -                                    |
| Environmentally hazardous:  | -                                    |
| Special precautions for user:   | -                                    |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: | -                                    |
| Transporting/shipment by air (IC  | AO-TI/IATA-DGR)                      |
| UN number:  | Not subject to transport regulations |
| UN proper shipping name:  | -                                    |
| Transport hazard class(es):   | -                                    |
| Packing group:  | -                                    |



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| Environmentally hazardous: |      | - |
|----------------------------|------|---|
| Special precautions for us | ser: | - |
|                            |      |   |
| Further information:       | -    |   |

| <b>SECTI</b> 15.1 | ON 15. Regulatory informa           |   |
|-------------------|-------------------------------------|---|
| 15.1              | EU regulations                      | nmental regulations/legislation specific for the substance or mixture   |
|                   | Authorization and/or rest           | rictions of use   |
|                   | Authorizations:                     | -   |
|                   | Restrictions:                       | -   |
|                   | Other EU regulations:               | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); |
|                   | Information according 19 guideline) | 99/13/EC about limitation of emissions of volatile organic compounds (VOC-  |
|                   | National legislation:               | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act   |
| 15.2              | Chemical safety assessme            | ent   |
|                   | None                                |   |

| SECTION 16. Other information |                        |   |  |
|-------------------------------|------------------------|---|--|
| 16.1                          | Indication of changes: | - |  |



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| 16.2    | Abl    | oreviations and acronyms:                 | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative |
|---------|--------|---|---|
| 16.3.   |        | literature references and rce of data:    | -   |
| 16.4.   |        | ssification and procedure<br>2/2008 (CLP) | used to derive the classification for mixture according to Regulation (EC)  |
| Classif | icatio | า   | Classification procedure  |
| _       |        |   | -   |
| 16.5.   | Rel    | evant H statements (numl                  | per and full text)  |
|         | H:     | H302                                      | Harmful if swallowed.   |
|         |        | H314                                      | Causes severe skin burns and eye damage   |
|         |        | H318                                      | Causes serious eye damage.  |
|         |        | H331                                      | Toxic if inhaled.   |
|         |        | (EUH031)                                  | Contact with acids liberates toxic gas.   |
| 16.6.   | Tra    | ining advice:                             | -   |
|         |        |   | ** "X" in the product code marks different volumes (different packagings of the product)  |
| 16.7.   | Fur    | ther information:                         | We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.   |

| ANNEX: Exposure scenario resulting to chemical safety assessment |  |
|--|--|
| -  |  |



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| Trading name: |             | HCL REAG             | ENT, P.A.S.      |            |
|---------------|-------------|----------------------|------------------|------------|
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| SECTI | ION 1: Identification of the substance/mixture and of the company/undertaking |                |  |   |  |
|-------|---|----------------|--|---|--|
| 1.1.  | Product identifier  |                |  |   |  |
|       | Trading name:   | HCL REAC       | GENT, P.A.S.                             |   |  |
|       | Chemical name:  | -              |  |   |  |
|       | Catalogue number:   | HCLP-OT        | -X**                                     |   |  |
| 1.2.  | Relevant identified us  | es of the sul  | ostance or mix                           | ture and uses advised against   |  |
|       | Uses:   |                | For use wit                              | ch special staining kits in histopathology.   |  |
|       | Uses advised against:   |                | Only the ic                              | lentified uses are advised.   |  |
|       | Reason why uses adv   | ised against:  | medical de                               | The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes |  |
| 1.3.  | Details of the supplie  | r of the safet | y data sheet                             |   |  |
|       | Supplier:   | Supplier:      |  | BioGnost Ltd.   |  |
|       |   |                | Medjugorska 59, Zagreb<br>+385 1 2409997 |   |  |
|       |   |                |  |   |  |
|       | rerepriorie mamber.   |                | +385 1 240999                            | 97  |  |
|       | Fax no.:  |                | +385 1 240999                            |   |  |
|       |   |                |  | 39  |  |
|       | Fax no.:  | person:        | +385 1 240403                            | 39  |  |
| 1.4.  | Fax no.:<br>e-mail of competent   | person:        | +385 1 240403<br>msds@biogno             | 39  |  |
| 1.4.  | Fax no.: e-mail of competent National contact:                                | person:        | +385 1 240400<br>msds@biogno<br>-        | 39  |  |
| 1.4.  | Fax no.: e-mail of competent National contact: Emergency telephone            | person:        | +385 1 240400<br>msds@biogno<br>-        | 39<br>ost.hr  |  |

| SECTIO   | N 2. Hazards identification                |                  |                     |
|----------|--|------------------|---------------------|
| 2.1.     | Classification of the substance or mixture |                  |                     |
| 2.1.1.   | Classification according to Regula         | ation (EC) No 12 | 72/2008 (CLP)       |
|          | Hazard class and category                  | / code:          | Hazard statements*: |
|          | Not identified as hazardous subst          | ance.            | -                   |
| 2.1.2.   | Additional information                     |                  |                     |
|          | -  |                  |                     |
| *For ful | l text of Hazard- and EU Hazard-sta        | atements: see Se | ection 16           |
| 2.2.     | Label elements                             |                  |                     |
|          | Product identification:                    | HCL REAGENT      | , P.A.S.            |
|          | Identification number:                     | -                |                     |
|          | Authorization no.:                         | -                |                     |
|          | Hazard pictograms:                         | -                |                     |



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|      | Signal word:                         | -       |
|------|--------------------------------------|---------|
|      | Hazard statements:                   | -       |
|      | Precautionary statements:            | -       |
|      | Supplemetal hazard information (EU): | -       |
| 2.3. | Other hazards                        |         |
|      | Endocrine Disrupting Properties:     |         |
|      | No known endocrine disrupting prop   | erties. |

| SECTION 3. Composition/information on ingredients |                          |                                |                     |  |
|---|--------------------------|--------------------------------|---------------------|--|
| CAS/<br>EC/<br>Index no.                          | REACH<br>Registration No | Weight % content<br>(or range) | Identification name | Classification according to<br>Regulation (EC) No<br>1272/2008 (CLP) |
| 7647-01-0/<br>231-595-7/<br>017-002-00-2          | -                        | 0.7 - 1 %                      | hydrochloric acid   | Skin Corr. 1B; H314<br>STOT SE 3; H335                               |

| SECTIO | ION 4. First aid measures        |   |  |  |
|--------|----------------------------------|---|--|--|
| 4.1.   | Description of first aid measur  | res   |  |  |
|        | General notes:                   | -   |  |  |
|        | Following inhalation:            | Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician. |  |  |
|        | Following skin contact:          | Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.   |  |  |
|        | Following eye contact:           | Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.  |  |  |
|        | Following ingestion:             | Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention.                                   |  |  |
|        | Self-protection of the first aid | er: Treat symptomatically.  |  |  |
| 4.2.   | Most important symptoms an       | d effects, both acute and delayed   |  |  |
|        | Following inhalation:            | No information available  |  |  |
|        | Following skin contact:          | No information available  |  |  |
|        | Following eye contact:           | No information available  |  |  |



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|      | Following ingestion: No information available                              |
|------|--|
| 4.3. | Indication of any immediate medical attention and special treatment needed |
|      | -  |

| SECTIO | SECTION 5. Firefighting measures  |  |  |  |  |
|--------|---|--|--|--|--|
| 5.1.   | Extinguishing media   |  |  |  |  |
|        | Suitable extinguishing media:  Small fire - water spray, dry powder, CO <sub>2</sub> Large fire - water spray or alcohol-resistant foam                         |  |  |  |  |
|        | Unsuitable extinguishing media: water jet   |  |  |  |  |
| 5.2.   | Special hazards arising from the substance or mixture   |  |  |  |  |
|        | Hazardous combustion products: No information available   |  |  |  |  |
| 5.3.   | Advice for firefighters   |  |  |  |  |
|        | Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.  Cool closed containers exposed to fire with water spray or vapor. |  |  |  |  |
| 5.4.   | Additional information  |  |  |  |  |
|        | Remove sources of heat and ignition.  Do not contaminate the environment with extinguishing media.  |  |  |  |  |

| SECTIO  | SECTION 6. Accidental release measures  |  |  |  |  |
|---|---|--|--|--|--|
| 6.1.  | Personal precautions, protective equipment and emergency procedures   |  |  |  |  |
| 6.1.1.  | For non-emergency personnel   |  |  |  |  |
|   | Protective equipment:   | Use personal protective equipment (see Section 8).   |  |  |  |
|   | Accident prevention methods   | Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke. |  |  |  |
|   | Emergency procedures:   | Mark the area using proper signs.  |  |  |  |
| 6.1.2.  | For emergency responders:   |  |  |  |  |
| Wear protective equipment (see Section 8).  6.2. Environmental precautions: |   | see Section 8).  |  |  |  |
|   |   |  |  |  |  |
|   | Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112. |  |  |  |  |
| 6.3.  | Methods and material for containment and cleaning up  |  |  |  |  |
| 6.3.1.  | Bunding, covering of drains; capping procedures:  | Sand or clay barriers.   |  |  |  |



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| Trading name: | HCL REAGENT, P.A.S. |                      |                  |            |  |  |
|---------------|---------------------|----------------------|------------------|------------|--|--|
| Product code: | HCLP-OT-X**         | Date of compilation: | 14 November 2022 | Version: 4 |  |  |

| 6.3.2. | Cleaning up:  | Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water. |  |  |
|--------|---|---|--|--|
| 6.3.3. | Other information:  | -   |  |  |
| 6.4.   | Reference to other section  | ns  |  |  |
|        | See Section 7 for information about secure handling.  See Section 8 for information about personal protective equipment.  See Section 13 for information about containment. |   |  |  |

| SECTIO | CTION 7. Handling and storage  |   |  |  |  |  |  |
|--------|--|---|--|--|--|--|--|
| 7.1.   | Precautions for safe handling  |   |  |  |  |  |  |
| 7.1.1. | Protection measures  |   |  |  |  |  |  |
|        | Measures to prevent fire:  |   | Geep away from sources of heat and ignition. Do not smoke.   |  |  |  |  |
|        | Measures to prevent aerosol and dust generati  | on: S   | Secure proper ventilation.   |  |  |  |  |
|        | Measures to protect the environment:   |   | Prevent spilling into the sewage system and vaterways.   |  |  |  |  |
|        | Other measures:  | -   |  |  |  |  |  |
| 7.1.2. | Advice on general occupational hygiene:  |   |  |  |  |  |  |
|        | Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating. |   |  |  |  |  |  |
| 7.2.   | Conditions for safe storage, including any incompatibilities                                     |   |  |  |  |  |  |
|        | Technical measures and storage conditions:   | Keep in tightly closed and upright set containers in a ventilated storage rooms, and away from sources of be sunlight, and other incompatible substances.                   |  |  |  |  |  |
|        | Packaging materials:   | Manu  | facturer's original packaging.   |  |  |  |  |
|        | Requirements for storage rooms and vessels:  | Keep away from food and drink. Keep the containers tightly closed.  |  |  |  |  |  |
|        | Advices for storage equipment:   | The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation. |  |  |  |  |  |
|        | Further information on storage conditions:   | and d   | ot place the unused material in the storage room o not use empty containers for storing other cals. Do not store with incompatible materials (see on 9). |  |  |  |  |
| 7.3.   | Specific end use(s)  |   |  |  |  |  |  |



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| Trading name:      | HCL REAGENT, P.A.S.  |                       |            |                       |                    |            |                           |    |
|--------------------|--|-----------------------|------------|-----------------------|--------------------|------------|---------------------------|----|
| Product code:      | Product code: HCLP-OT-X** Date of compilation: 14 November 2022 Version: |                       |            |                       |                    | Version: 4 |                           |    |
| Recomi             | mendatio   | ns:                   |            | -                     |                    |            |                           |    |
| Industri           | ial sector   | specific soluti       | ons:       | -                     |                    |            |                           |    |
| SECTION 8. Exp     | osure co   | ntrols/perso          | nal protec | tion                  |                    |            |                           |    |
|                    | paramet  |                       |            |                       |                    |            |                           |    |
| Substar            | nce  | CAS                   | S No       | Occupational e        | •                  | Biolo      | gical limit values        |    |
|                    |  |                       |            | ppm                   | mg/m³              | ]          |                           |    |
| -                  |  |                       | _          | -                     | -                  | No informa | ntion available           |    |
|                    |  |                       |            |                       |                    |            |                           |    |
| Substance name:    |  |                       |            |                       |                    |            |                           |    |
| EC No: -           |  | CAS No:               | _          |                       |                    |            |                           |    |
| DNEL               |  |                       |            |                       |                    |            |                           |    |
|                    |  |                       |            | Industrial            |                    |            |                           |    |
| Route of exposu    | re:  | Acute<br>effect local | effe       | Acute<br>ect systemic | Chron<br>effect lo |            | Chronic<br>effect systemi | ic |
| Oral               | -  |                       | -          |                       | -                  | -          |                           |    |
| Inhalation         | -  |                       | -          |                       | -                  | -          |                           |    |
| Dermal             | -  |                       | -          |                       | -                  | -          |                           |    |
| Critical physical  | paramete   | rs: solubility, 1     | lammabili  | ty, corrosivity:      | -                  |            |                           |    |
|                    |  |                       |            | Consumer              |                    |            |                           |    |
| Route of exposure: |  | Acute<br>effect local | effe       | Acute<br>ect systemic | Chron<br>effect lo | -          | Chronic<br>effect systemi | ic |

#### Dermal **PNEC**

Oral

Inhalation

\_

| Environmental protection target    | PNEC                     |
|------------------------------------|--------------------------|
| Fresh water                        | No information available |
| Freshwater sediments               | No information available |
| Marine water                       | No information available |
| Marine sediments                   | No information available |
| Food chain                         | No information available |
| Microorganisms in sewage treatment | No information available |
| Soil (agricultural)                | No information available |

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| Trading name: | HCL REAGENT, P.A.S. |                      |                  |            |  |  |
|---------------|---------------------|----------------------|------------------|------------|--|--|
| Product code: | HCLP-OT-X**         | Date of compilation: | 14 November 2022 | Version: 4 |  |  |

| Air      |  |  | No information available  |  |  |
|----------|--|--|---|--|--|
| 0.2      |  |  |   |  |  |
| 8.2.     | Exposure controls  |  |   |  |  |
| 8.2.1.   | Appropriate engineering  |  | 5   |  |  |
|          | Substance/mixture relate measures to prevent expoduring identified uses: |  | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.   |  |  |
|          | Structural measures to prexposure:                                       | event  | No information available  |  |  |
|          | Organisational measures prevent exposure:                                | to   | Organization of work in order to reduce other worker's influence during work process.   |  |  |
|          | Technical measures to preexposure:                                       | event  | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.  |  |  |
| 8.2.2.   | Personal protection equip  | oment  |   |  |  |
| 8.2.2.1. | Eye and face protection:   | n: Safety glasses that stick to face (preventing splashing) ( visor. |   |  |  |
| 8.2.2.2. | Skin protection  |  |   |  |  |
| O.L.L.   | Hand protection:   |  | ctive gloves must be according to the EU Directive 2016/425/EEC and ard EN 374.  Glove material: nitrile rubber  Glove thickness: ≥0.50 mm  Break through time: >480 min            |  |  |
|          | Other skin protection:   |  | antistatic clothing made of natural fibers (such as cotton) with long es (EN 13034), and shoes that cover the entire foot (EN 10335).   |  |  |
| 8.2.2.3. | Respiratory protection:  | filter f   | ctive full face mask (EN 136) or half mask (EN 140) equipped with a for organic vapors, type "A" (boiling point >65°C) acording to EN 7) used when concentration levels exceed GVI. |  |  |
| 8.2.2.4. | Thermal hazards:   | No inf   | formation available   |  |  |
| 8.2.3.   | Environmental exposure   | controls   |   |  |  |
|          | Substance/mixture relate measures to prevent expo                        |  | See Section 6   |  |  |
|          | Structural measures to prexposure:                                       | event  | Use modern equipment.   |  |  |
|          | Organisational measures prevent exposure:                                | to   | Adapt the work process to the required working conditions of the workplace.   |  |  |
|          | Technical measures to preexposure:                                       | event  | See Section 6   |  |  |

#### **SECTION 9. Physical and chemical properties**



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| Trading name: | HCL REAGENT, P.A.S. |                      |                  |            |  |  |
|---------------|---------------------|----------------------|------------------|------------|--|--|
| Product code: | HCLP-OT-X**         | Date of compilation: | 14 November 2022 | Version: 4 |  |  |

|   | Value                    | Method                   |
|---|--------------------------|--------------------------|
| Physical state:   | liquid                   | No information available |
| Color:  | colourless               | No information available |
| Odour/odour threshold:                                    | no information available | No information available |
| Melting point / freezing point:                           | No information available | No information available |
| Boiling point or initial boiling point and boiling range: | No information available | No information available |
| Flammability:   | No information available | No information available |
| Lover and upper explosion limit:                          | No information available | No information available |
| Flash point:  | No information available | No information available |
| Auto-ignition temperature:                                | No information available | No information available |
| Decomposition temperature:                                | No information available | No information available |
| pH:   | No information available | No information available |
| Kinematic viscosity:                                      | No information available | No information available |
| Solubility:   | No information available | No information available |
| Partition coefficient n-octanol/water (log value):        | No information available | No information available |
| Vapour pressure:  | No information available | No information available |
| Density and/or relative density                           | No information available | No information available |
| Relative vapour density:                                  | No information available | No information available |
| Particle characteristics:                                 | No information available | No information available |

| SECTIO | SECTION 10.: Stability and reactivity |  |  |  |  |
|--------|---------------------------------------|--|--|--|--|
| 10.1.  | Reactivity:                           | See subsections 10.3 through 10.5.   |  |  |  |
| 10.2.  | Chemical stability:                   | The product is chemically stable under standard ambient conditions of storing and using. |  |  |  |
| 10.3.  | Possibility of hazardous reactions:   | No information available.  |  |  |  |
| 10.4.  | Conditions to avoid:                  | No information available.  |  |  |  |
| 10.5.  | Incompatible materials:               | No information available.  |  |  |  |
| 10.6.  | Hazardous decomposition products:     | No information available.  |  |  |  |

| SECTIO | ON 11. Toxicological information   |
|--------|--|
| 11.1.  | Information on hazard classes as defined in Regulation (EC) No 1272/2008 |



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| Trading name: | HCL REAGENT, P.A.S. |                      |                  |            |  |  |
|---------------|---------------------|----------------------|------------------|------------|--|--|
| Product code: | HCLP-OT-X**         | Date of compilation: | 14 November 2022 | Version: 4 |  |  |

| Acute toxi   | city:   |                  |   |                      |   |         |
|--|---|------------------|---|----------------------|---|---------|
| Route of exposure:   | Method  | Species          | Effective Dose<br>LD <sub>50</sub> /LC <sub>50</sub> or<br>ATE <sub>mixture</sub> | Exposure             | e time                                  | Results |
| Oral exposure:   | No information available  | -                | LD <sub>50</sub>  | -                    |   | -       |
| Dermal exposure:   | No information available  | -                | LD <sub>50</sub>  | -                    |   | -       |
| Inhalation exposure:   | No information available  | -                | LC <sub>50</sub>  | _                    | *************************************** | -       |
| Specific ta  | rget organ toxicity – si  | ingle exposure ( | STOT SE):   |                      |   |         |
|  | Specif  | ic effects       | Target  | organ                |   | Note    |
| Oral exposure:   | No information  | available        | No information  | on available         | -                                       |         |
| Dermal exposure:   | No information  | available        | No information  | on available         | -                                       |         |
|  |   |                  | No information available -  |                      |   |         |
| Inhalation exposure  | e: No information   | available        | No information  | on available         | -                                       |         |
| •  | 1   |                  |   | on available         | -                                       |         |
| Inhalation exposure Aspiration   | 1   |                  | No information  | on available         | -                                       |         |
| Aspiration   | 1   |                  |   | on available         | -                                       |         |
| Aspiration   | hazard:   |                  |   | on available  Method | -                                       | Note    |
| Aspiration   | hazard:<br>nd corrosion:  | No info          | rmation available   | Method               | -                                       | Note    |
| Aspiration  Irritation a   | hazard: nd corrosion: Exposure time   | No info          | rmation available  Evaluation   | Method<br>-          |   | Note    |
| Aspiration  Irritation a  Skin irritation:   | hazard:  nd corrosion:  Exposure time   | No info          | rmation available  Evaluation  -  | Method<br>-          | -                                       | Note    |
| Aspiration  Irritation a  Skin irritation:   | hazard: nd corrosion: Exposure time   | No info          | rmation available  Evaluation  -  | Method<br>-          | -                                       | Note    |
| Aspiration  Irritation a  Skin irritation:  Eye irritation:  Sensitization   | hazard: nd corrosion: Exposure time   | Species          | rmation available  Evaluation  -  | Method<br>-          | -                                       | Note    |
| Aspiration  Irritation a  Skin irritation:  Eye irritation:  Sensitization   | hazard:  nd corrosion:  Exposure time  -  -   | Species lable    | rmation available  Evaluation  -  | Method<br>-          | -                                       | Note    |
| Aspiration  Irritation a  Skin irritation:  Eye irritation:  Sensitization  Dermal exposure: Inhalation exposure:                            | hazard:  nd corrosion:  Exposure time  -  -  No information avail   | Species lable    | Evaluation -  | Method<br>-<br>-     | -                                       | Note    |
| Aspiration  Irritation a  Skin irritation:  Eye irritation:  Sensitization  Dermal exposure: Inhalation exposure:  Symptoms                  | hazard:  nd corrosion:  Exposure time  -  -  On  No information avail  No information avail   | Species          | Evaluation -  | Method<br>-<br>-     | -                                       | Note    |
| Aspiration  Irritation a  Skin irritation:  Eye irritation:  Sensitization  Dermal exposure: Inhalation exposure:                            | hazard:  nd corrosion:  Exposure time  -  -  No information avail  No information avail   | Species          | Evaluation -  | Method<br>-<br>-     | -                                       | Note    |
| Aspiration  Irritation a  Skin irritation:  Eye irritation:  Sensitization  Dermal exposure:  Inhalation exposure:  Symptoms  Oral exposure: | hazard:  nd corrosion:  Exposure time  On  No information avail  No information avail  related to the physica  No information avail  No information avail | Species          | Evaluation -  | Method<br>-<br>-     | -                                       | Note    |



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| Trading name: |             | HCL REAGENT, P.A.S.  |                  |            |  |  |  |  |
|---------------|-------------|----------------------|------------------|------------|--|--|--|--|
| Product code: | HCLP-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 |  |  |  |  |

|                        | Dose                     | Exposure time                  | Species                        | Method                         | Evaluation                     | Note     |
|------------------------|--------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------|
| Subacute oral          | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -        |
| Subacute<br>dermal     | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -        |
| Subacute<br>inhalation | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available |          |
| Subchronic oral        | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available |          |
| Subchronic<br>dermal   | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available |          |
| Subchronic inhalation  | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | <b>-</b> |
| Chronic oral           | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available |          |
| Chronic dermal         | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available |          |
| Chronic inhalation     | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available |          |

| Specific target organ toxicity – repeated exposure (STOT RE): |                          |                          |      |  |  |  |  |
|---|--------------------------|--------------------------|------|--|--|--|--|
|   | Specific effects         | Target organ             | Note |  |  |  |  |
| Subacute oral   | No information available | No information available | -    |  |  |  |  |
| Subacute dermal   | No information available | No information available | -    |  |  |  |  |
| Subacute inhalation   | No information available | No information available | -    |  |  |  |  |
| Subchronic oral   | No information available | No information available | -    |  |  |  |  |
| Subchronic dermal   | No information available | No information available | -    |  |  |  |  |
| Subchronic inhalation   | No information available | No information available | -    |  |  |  |  |
| Chronic oral  | No information available | No information available | -    |  |  |  |  |
| Chronic dermal  | No information available | No information available | -    |  |  |  |  |



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| Trading name: | HCL REAGENT, P.A.S. |                      |                  |            |  |  |  |  |
|---------------|---------------------|----------------------|------------------|------------|--|--|--|--|
| Product code: | HCLP-OT-X**         | Date of compilation: | 14 November 2022 | Version: 4 |  |  |  |  |

| Chronic | inhalation     | No informa       | tion available       | No information available                | -            |
|---------|----------------|------------------|----------------------|---|--------------|
|         |                |                  |                      |   |              |
|         | CMR effects (  | (carcinogenicity | ; mutagenicity; repr | oductive toxicity)                      |              |
|         | Carcinogenic   | ity:             | Based on availa      | ble data, the classification criteria a | are not met. |
|         | Mutagenicity   | in-vitro:        | Based on availa      | ble data, the classification criteria a | are not met. |
|         | Genotoxicity:  |                  | Based on availa      | ble data, the classification criteria a | are not met. |
|         | Mutagenicity   | in-vivo:         | Based on availa      | ble data, the classification criteria a | are not met. |
|         | Germ cell mu   | tagenicity:      | Based on availa      | ble data, the classification criteria a | are not met. |
|         | Reproductive   | toxicity:        | Based on availa      | ble data, the classification criteria a | are not met. |
|         |                |                  |                      |   |              |
|         | Summary of e   | evaluation of th | e CMR properties:    | -                                       |              |
|         |                |                  |                      |   |              |
| 11.2.   | Information of | on other hazard  | s:                   |   |              |
| 11.2.1. | Endocrine dis  | rupting proper   | ties:                |   |              |
|         | No known en    | docrine disrup   | ting properties that | affect human health.                    |              |
| 11.2.2. | Other inform   | ations:          |                      |   |              |
|         | _              |                  |                      |   |              |

#### **SECTION 12. Ecological information**

| 12 1 | T = 1, 1; =: 4, 1 |  |
|------|-------------------|--|
| 1/ 1 | Toxicity          |  |

| 12.1. TOXICITY               |                  |                  |                          |                          |                                |      |
|------------------------------|------------------|------------------|--------------------------|--------------------------|--------------------------------|------|
| Acute toxicity               | Dose             | Exposure<br>time | Species                  | Method                   | Evaluation                     | Note |
| Fish                         | LC <sub>50</sub> | 96 hours         | No information available | No information available | -                              | -    |
| Crustacea:                   | EC <sub>50</sub> | 48 hours         | No information available | No information available | -                              | -    |
| Algae/aquatic plants         | IC <sub>50</sub> | 8 days           | No information available | No information available | _                              | _    |
| Microorganisms               | LC <sub>50</sub> | 72 hours         | -                        | -                        | _                              | -    |
| Chronic (long-term) toxicity | Dose             | Exposure<br>time | Species                  | Method                   | Evaluation                     | Note |
| Fish                         | LC <sub>50</sub> | 96 hours         | No information available | No information available | No<br>information<br>available | 1    |
| Crustacea:                   | EC <sub>50</sub> | 48 hours         | No information available | No information available | No<br>information<br>available | -    |



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| Trading nam                | e:       |                                  |                 |        | HCL REA                  | GEN                             | T, P.A.S.                 |           |                       |       |      |
|----------------------------|----------|----------------------------------|-----------------|--------|--------------------------|---------------------------------|---------------------------|-----------|-----------------------|-------|------|
| Product cod                | e:       | HCLP-OT-X                        | <b>*</b> *      | Date   | e of compilation:        | 1.                              | 4 November                | Vers      | ion:                  | 4     |      |
| Algae/aquatic              | plants   | IC <sub>50</sub>                 | 72 hou          | rs     | No information available |                                 | information<br>ilable     | ation le  | _                     |       |      |
| Other organis              | ms       | _                                | -               |        | -                        | -                               |                           | -         |                       | -     |      |
| 12.2. Persi                | stence : | and degrada                      | bility          |        |                          |                                 |                           |           |                       |       |      |
|                            |          | adation                          |                 |        |                          |                                 |                           |           |                       |       |      |
| ·                          | De       | gradation ha                     | lf-lives        |        | Method                   |                                 | Ev                        | aluation  |                       |       | Note |
| Marine<br>water            | No in    | formation av                     | ailable         | No     | information availa       | able                            | No informat               | tion avai | lable                 | -     |      |
| Fresh water                | No in    | ıformation av                    | ailable         | No     | information availa       | able                            | No informat               | tion avai | lable                 | -     |      |
| Air                        | No in    | formation av                     | ailable         | No     | information availa       | able                            | No informat               | tion avai | lable                 | -     |      |
| Soil                       | No in    | formation av                     | ailable         | No     | information availa       | ble                             | No informat               | tion avai | lable                 | -     |      |
|                            |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |
|                            | egradat  |                                  | ,               |        |                          |                                 |                           |           | -                     |       |      |
| % Degradation              |          | Time (day                        |                 | NI = : | Method                   |                                 | Evaluation                |           |                       | lote  |      |
| No informatic<br>available |          | ailable                          |                 | availa | nformation<br>able       |                                 | o information<br>vailable |           | o informa<br>vailable | ation |      |
|                            |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |
|                            |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |
| 40.2 B'                    |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |
|                            |          | etive potentia<br>er partition o |                 | t (log | Kowi                     |                                 |                           |           |                       |       |      |
| Value                      |          | entration                        | рН              | °C     |                          |                                 | Evaluati                  | on        |                       | Note  | ٠    |
|                            |          | nformation                       | ριι             |        | No information           | nn                              | No informat               |           |                       | IVOL  |      |
| _                          | availab  |                                  | -               | -      | available                | <b>211</b>                      | available                 |           | -                     |       |      |
|                            |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |
|                            |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |
| r:                         |          | -+: · · ·                        | DCE)            |        |                          |                                 |                           |           |                       |       |      |
| Value                      | ncentr   | ation factor (<br>Speci          |                 |        | Method                   | 0<br>0<br>0<br>0<br>0<br>0<br>0 | Evaluation                |           | N                     | Note  |      |
| No informatio              | n l      |                                  | es<br>formatior | n Ni   | o information            | N                               | o information             |           | No inform             |       | n    |
| available                  |          | available                        | . 5             |        | ailable                  |                                 | vailable                  |           | available             |       |      |
|                            |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |
|                            |          |                                  |                 | ····   |                          |                                 |                           |           |                       |       |      |
|                            |          |                                  |                 |        |                          |                                 |                           |           |                       |       |      |



No adverse effects are expected.

#### **SAFETY DATA SHEET** BIOGNOST® According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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| Trading name: |             | HCL REAGENT, P.A.S.  |                  |            |  |  |  |  |
|---------------|-------------|----------------------|------------------|------------|--|--|--|--|
| Product code: | HCLP-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 |  |  |  |  |

| Product   | code: H                          | CLP-OT-X**                     | Date of co               | mpilation                    | : 14 Nc                   | vember              | 2022                          | Versio | n: 4 |
|-----------|----------------------------------|--------------------------------|--------------------------|------------------------------|---------------------------|---------------------|-------------------------------|--------|------|
|           | Value                            | Dose                           | Exposure<br>time         | Species                      | Met                       | thod                | Evaluat                       | ion    | Note |
| Chronic t | oxicity on fish                  | LC <sub>50</sub>               | information i            | No<br>nformatio<br>available | No<br>n inform<br>availab | 1                   | No<br>informatio<br>available | on -   | -    |
|           | oxicity on<br>( <i>Daphnia</i> ) | EC <sub>50</sub>               | information i            | No<br>nformatio<br>available | No<br>n inform<br>availab |                     | No<br>informatio<br>available | on -   | _    |
| 12.4.     | Mobility in so                   | il                             |                          |                              |                           |                     |                               |        |      |
|           | Known or pre                     | dicted distributi              | ion in environmer        | ntal compa                   | artments:                 |                     |                               |        |      |
|           | No informatio                    | n available                    |                          |                              |                           |                     |                               |        |      |
|           | Surface tensio                   | on:                            |                          |                              |                           |                     |                               |        |      |
|           | Value                            | °C                             | Concentration            | on                           | Metho                     | od                  |                               | Note   | 9    |
| i         | No<br>nformation<br>available    | No<br>information<br>available | No information           |                              | nformatio<br>lable        | n                   | <del>-</del>                  | -      |      |
|           |                                  |                                |                          |                              |                           |                     |                               |        |      |
|           | Adsorption / o                   | desorption                     |                          |                              |                           |                     |                               |        |      |
| Transport | <b>†</b>                         | coefficient<br>o's constant    | log Kow                  | Evapora                      | ation rate                | Me                  | thod                          |        | Note |
| Soil-wate | r No<br>available                | information                    | No information available | No info<br>availabl          | rmation<br>e              | No info<br>availabl | rmation<br>e                  | -      |      |
| Water-air | No available                     | information                    | No information available | No info<br>availabl          | rmation<br>e              | No info<br>availabl | rmation<br>e                  | -      |      |
| Soil-air  | No<br>available                  | information                    | No information available | No info<br>availabl          | rmation<br>e              | No info<br>availabl | rmation<br>e                  | -      |      |
| 12.5. I   | Results of PRT                   | and vPvB asses                 | ssment                   |                              |                           |                     |                               |        |      |
|           | No information                   |                                | 5511101110               |                              |                           |                     |                               |        |      |
|           |                                  |                                |                          |                              |                           |                     |                               |        |      |
| 12.6.     | Endocrine disi                   | rupting propert                | ies                      |                              |                           |                     |                               |        |      |
|           |                                  |                                | ng properties tha        | at affect th                 | e environn                | nent.               |                               |        |      |
|           |                                  | '                              | <u> </u>                 |                              |                           |                     |                               |        |      |
| 12.7.     | Other adverse                    | e effects                      |                          |                              |                           |                     |                               |        |      |
|           | NI l                             | CC +                           | 4                        |                              |                           |                     |                               |        |      |



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| SECTION                     | N 13. Disposal considerat              | ions   |  |  |
|-----------------------------|--|--|--|--|
| 13.1.                       | Waste treatment metho                  |  |  |  |
| 15.1.                       | waste treatment metho                  | us   |  |  |
| 13.1.1.                     | Product/Packaging disp                 | osal:  |  |  |
|                             | Submit for disposal to the Protection. | ne legal person authorized by the Ministry of Environmental and Nature   |  |  |
| 13.1.2.                     | Waste codes/waste desi                 | gnations according to Law:   |  |  |
|                             | No information available               |  |  |  |
| 13.1.3.                     | Waste treatment – relev                | ant information:   |  |  |
|                             | No information available               |  |  |  |
| 13.1.4.                     | Sewage disposal – relev                | ant information:   |  |  |
| 15.1.4.                     | 3 .                                    |  |  |  |
|                             | waste must not be disp                 | osed of into the sewage system.  |  |  |
| 13.1.5.                     | Other disposal recommendations:        |  |  |  |
|                             | authorized by the minist               | roduct's remains into the sewage system. Submit the remains to the collectors cry in charge. Do not dispose of the packaging into the sewage system. Submit electors authorized by the ministry in charge. Do not dispose of in places where |  |  |
| 13.1.6.                     | Relevant Community pro                 | ovisions:  |  |  |
|                             | -                                      |  |  |  |
|                             |  |  |  |  |
| SECTIO                      | N 14. Transport informati              |  |  |  |
|                             | Transporting/shipment by               |  |  |  |
| UN num                      |  | Not subject to transport regulations.  |  |  |
| UN proper shipping name:    |  |  |  |  |
| Transport hazard class(es): |  |  |  |  |
| Packing group:              |  |  |  |  |
| Environmentally hazardous:  |  |  |  |  |
| Special                     | orecautions for user:                  | - (200)  |  |  |
|                             | Transporting/shipment by               | Not subject to transport regulations.  |  |  |
| UN number:                  |  |  |  |  |



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|-------------------------------|----------------------|----------------------------------|------------------|----------|---|
| Product code:                 | HCLP-OT-X**          | Date of compilation:             | 14 November 2022 | Version: | 4 |
| Transport hazard c            | ·lass(es):           | _                                |                  |          |   |
| Packing group:                |                      | -                                |                  |          |   |
| Environmentally ha            | azardous:            | -                                |                  |          |   |
| Special precaution            |                      | _                                |                  |          |   |
|                               | terway transport (AD | DN)                              |                  |          |   |
| UN number:                    |                      | Not subject to transport         | regulations.     |          |   |
| UN proper shippin             | g name:              | -                                |                  |          |   |
| Transport hazard c            |                      | _                                |                  |          |   |
| Packing group:                |                      | _                                |                  |          |   |
| Environmentally ha            | azardous:            | _                                |                  |          |   |
| Special precaution            |                      | _                                |                  |          |   |
|                               | ing/shipment by sea  | (IMDG)                           |                  |          |   |
| UN number:                    |                      | Not subject to transport         | regulations.     |          |   |
| UN proper shippin             | g name:              | -                                |                  |          |   |
| Transport hazard c            | :lass(es):           | -                                |                  |          |   |
| Packing group:                |                      | -                                |                  |          |   |
| Environmentally ha            | azardous:            | -                                |                  |          |   |
| Special precaution            | s for user:          | -                                |                  |          |   |
| Transport                     | ing/shipment by air  | (ICAO-TI/IATA-DGR)               |                  |          |   |
| UN number:                    |                      | Not subject to transport         | regulations.     |          |   |
| UN proper shippin             | g name:              | -                                |                  |          |   |
| Transport hazard c            | lass(es):            | -                                |                  |          |   |
| Packing group:                |                      | -                                |                  |          |   |
| Environmentally ha            | azardous:            | -                                |                  |          |   |
| Special precautions for user: |                      | -                                |                  |          |   |
|                               |                      |                                  |                  |          |   |
| Further information           | n: The product       | is not subject to classification | on.              |          |   |

| SECTIO | SECTION 15. Regulatory information   |   |  |  |  |
|--------|--|---|--|--|--|
| 15.1.  | Safety, health and environmental regulations/legislation specific for the substance or mixture |   |  |  |  |
|        | EU regulations   |   |  |  |  |
|        | Authorization and/or restrictions of use   |   |  |  |  |
|        | Authorizations:  | - |  |  |  |
|        | Restrictions:  | - |  |  |  |



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| Trading name: |             | HCL REAG             | CL REAGENT, P.A.S. |            |  |
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|       |                                       | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and   |
|-------|---------------------------------------|---|
|       |                                       | Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC;   |
|       | Other EU regulations:                 | Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;   |
|       |                                       | Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work;   |
|       |                                       | Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;   |
|       |                                       | REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);   |
|       | Information according 1999 guideline) | 9/13/EC about limitation of emissions of volatile organic compounds (VOC-   |
|       | National legislation:                 | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act |
| 15.2. | Chemical safety assessmen             | t   |
|       | None                                  |   |

| SECTIO  | SECTION 16. Other information |                    |   |  |
|---|-------------------------------|--------------------|---|--|
| 16.1.   | Indication of changes:        | -                  |   |  |
|   |                               |                    | Stable, bioaccumulative and toxic                       |  |
|   |                               | vPvB               | Strongly stable and strongly bioaccumulative.           |  |
| 16.2.   | Abbreviations and acronyms:   | LD <sub>50</sub>   | Lethal dose, 50%  |  |
|   |                               | LC <sub>50</sub>   | Lethal concentration, 50%                               |  |
|   |                               | STOT-SE            | Specific target organ toxicity - single exposure        |  |
| 16.3.   | Key literature references and | _                  |   |  |
| 10.5.   | source of data:               |                    |   |  |
| 16.4. Classification and procedure used to derive the classification for mixture according to 1272/2008 (CLP) |                               |                    | classification for mixture according to Regulation (EC) |  |
| Classification C  |                               | Classification pro | Classification procedure                                |  |
|   |                               | _                  |   |  |



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| Product code: | HCLP-OT-X**         | Date of compilation: | 14 November 2022 | Version: 4 |  |

| 16.5. | Relevant H statements (number and full text) |   |  |
|-------|--|---|--|
|       | H: 314<br>335                                | Causes severe skin burns and eye damage.  May cause respiratory irritation.   |  |
| 16.6. | Training advice:                             | -   |  |
| 16.7. | Further information:                         | ** "X" in the product code marks different volumes (different packagings of the product)  We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet. |  |

| ANNEX: Exposure scenario resulting to Chemical safety assessment |
|--|
|  |



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| Trading name: |              | OXYLIN ML      | _           |          |   |
|---------------|--------------|----------------|-------------|----------|---|
| Product code: | HEMML-OT-X** | Revision date: | 27.03.2023. | Version: | 9 |

| 1.1. | Product identifier                               |                            |  |   |  |  |
|------|--|----------------------------|--|---|--|--|
|      | Trading name:                                    | HEMATOXYLIN ML             |  |   |  |  |
|      | Chemical name:                                   | -                          |  |   |  |  |
|      | Catalogue number:                                | HEMML                      | -OT-X**  |   |  |  |
| 1.2. | Relevant identified use                          | es of the su               | ubstance or m  | ixture and uses advised against   |  |  |
|      | Uses:  |                            | Modified   | hematoxylin acc. to Mayer-Lillie for nuclear staining.  |  |  |
|      | Uses advised against:                            |                            | Only the   | identified uses are advised.  |  |  |
|      | Reason why uses advi                             | uses advised against:      |  | The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes |  |  |
| 1.3. | Details of the supplier of the safety data sheet |                            |  |   |  |  |
|      | Supplier:  |                            | BioGnost Ltd.  |   |  |  |
|      | Address:   |                            | Medjugorska 59, Zagreb<br>+385 1 2409997<br>+385 1 2404039 |   |  |  |
|      | Telephone number:                                |                            |  |   |  |  |
|      | Fax no.:   |                            |  |   |  |  |
|      | e-mail of competent p                            | erson:                     | msds@biogn   | msds@biognost.hr  |  |  |
|      | National contact:                                |                            | -  |   |  |  |
| 1.4. | Emergency telephone                              | Emergency telephone number |  |   |  |  |
|      | National Protection ar                           | nd Rescue                  | Directorate:   | 112   |  |  |
|      | Medical information:                             |                            |  | . 205 1 2240 242  |  |  |
|      | Medical information:                             |                            |  | +385 1 2348 342   |  |  |

| SECTIO   | SECTION 2. Hazards identification          |                       |                     |  |  |  |
|----------|--|-----------------------|---------------------|--|--|--|
| 2.1.     | Classification of the substance or mixture |                       |                     |  |  |  |
| 2.1.1.   | Classification according to Regul          | ation (EC) No 1272/20 | 08 (CLP)            |  |  |  |
|          | Hazard class and cate                      | gory code:            | Hazard statements*: |  |  |  |
|          | Eye Irr. 2 H319                            |                       |                     |  |  |  |
| 2.1.2.   | Additional information                     |                       |                     |  |  |  |
|          | -  |                       |                     |  |  |  |
| *For ful | I text of Hazard- and EU Hazard-sta        | atements: see Section | 16                  |  |  |  |
| 2.2.     | Label elements                             |                       |                     |  |  |  |
|          | Product identification: HEMATOXYLIN ML     |                       |                     |  |  |  |
|          | Identification number: -                   |                       |                     |  |  |  |
|          | Authorization no.:                         | -                     |                     |  |  |  |



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| Trading name: | HEMATOXYLIN ML |                |             |          |   |  |  |
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|      | Hazard pictograms:  | GHS07  |  |  |  |  |
|------|---|--|--|--|--|--|
|      | Signal word:  | Warning  |  |  |  |  |
|      | Hazard statements:  | H319 Causes serious eye irritation.  |  |  |  |  |
|      | Precautionary statements:   | P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. |  |  |  |  |
|      | Supplemetal hazard information (EU):  | -  |  |  |  |  |
| 2.3. | Other hazards   |  |  |  |  |  |
|      | Endocrine Disrupting Properties:  |  |  |  |  |  |
|      | No known endocrine disrupting properties <b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance is not a PBT or a vPvB. |  |  |  |  |  |

| SECTION 3. Composition/information on ingredients |                          |                                |                                     |  |  |  |  |  |
|---|--------------------------|--------------------------------|-------------------------------------|--|--|--|--|--|
| CAS/<br>EC/<br>Index no.                          | REACH<br>Registration No | Weight % content<br>(or range) | Identification<br>name              | Classification according to Regulation (EC) No 1272/2008 (CLP) |  |  |  |  |
| 7784-31-8/<br>616-524-3/<br>-                     | -                        | 3 – 4 %                        | aluminum sulfate<br>octadecahydrate | Eye Dam. 1; H318   |  |  |  |  |

| SECTI | ON 4. First aid measures       |  |  |  |  |  |
|-------|--------------------------------|--|--|--|--|--|
| 4.1.  | Description of first aid measu | Description of first aid measures  |  |  |  |  |
|       | General notes:                 | Take off contaminated clothing.  |  |  |  |  |
|       | Following inhalation:          | Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.   |  |  |  |  |
|       | Following skin contact:        | Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.  |  |  |  |  |
|       | Following eye contact:         | In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. |  |  |  |  |
|       | Following ingestion:           | Rinse mouth. Call a doctor if you feel unwell.   |  |  |  |  |



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|      | Self-protection of the first aider: Treat symptomatically.  |  |  |  |  |  |  |  |
|------|---|--|--|--|--|--|--|--|
| 4.2. | Most important symptoms and effects, both acute and delayed   |  |  |  |  |  |  |  |
|      | Following inhalation:   | Following inhalation: No information available |  |  |  |  |  |  |
|      | Following skin contact:  No information available  Following eye contact:  Risk of blindness, Risk of serious damage to eyes. |  |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |
|      | Following ingestion:  | No information available                       |  |  |  |  |  |  |
| 4.3. | Indication of any immediate medical attention and special treatment needed  |  |  |  |  |  |  |  |
|      | -   |  |  |  |  |  |  |  |

| SECTIO | N 5. Firefighting measures  |  |  |  |  |  |
|--------|---|--|--|--|--|--|
| 5.1.   | Extinguishing media   |  |  |  |  |  |
|        | Suitable extinguishing media:                                       | Small fire - water spray, dry powder, foam, CO <sub>2</sub> Large fire - water spray or alcohol-resistant foam |  |  |  |  |
|        | Unsuitable extinguishing media: water jet                           |  |  |  |  |  |
| 5.2.   | Special hazards arising from the substance or mixture               |  |  |  |  |  |
|        | Hazardous combustion products:  No information available            |  |  |  |  |  |
| 5.3.   | Advice for firefighters   |  |  |  |  |  |
|        | Do not enter fire area without pro                                  | per protective equipment, including respiratory protection.  |  |  |  |  |
| 5.4.   | Additional information  |  |  |  |  |  |
|        | Remove sources of heat and ignit<br>Do not contaminate the environm |  |  |  |  |  |

| SECTIO | SECTION 6. Accidental release measures  |  |  |  |  |  |
|--------|---|--|--|--|--|--|
| 6.1.   | Personal precautions, protective equ  | uipment and emergency procedures                           |  |  |  |  |
| 6.1.1. | For non-emergency personnel   |  |  |  |  |  |
|        | Protective equipment:   | Use personal protective equipment (see Section 8).         |  |  |  |  |
|        | Accident prevention methods: Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke. |  |  |  |  |  |
|        | Emergency procedures:   | Mark the area using proper signs.                          |  |  |  |  |
| 6.1.2. | For emergency responders:   |  |  |  |  |  |
|        | Do not enter fire area without prope  | er protective equipment, including respiratory protection. |  |  |  |  |
| 6.2.   | Environmental precautions:  |  |  |  |  |  |
|        | Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.                               |  |  |  |  |  |
| 6.3.   | Methods and material for containm   | ent and cleaning up  |  |  |  |  |



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| 6.3.1. | Bunding, covering of drains: Take up mechanically.  Covering of drains. Take up mechanically. |   |  |  |  |  |
|--------|---|---|--|--|--|--|
| 6.3.2. | Cleaning up:  | Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water. |  |  |  |  |
| 6.3.3. | Other information:  | Place in appropriate containers for disposal.   |  |  |  |  |
| 6.4.   | Reference to other sections   |   |  |  |  |  |
|        | See Section 7 for information about secure handling.  |   |  |  |  |  |
|        | See Section 8 for information about personal protective equipment.                            |   |  |  |  |  |
|        | See Section 13 for information  | n about containment.  |  |  |  |  |

| SECTIO | ON 7. Handling and storage   |  |  |  |  |  |
|--------|--|--|--|--|--|--|
| 7.1.   | Precautions for safe handling  |  |  |  |  |  |
| 7.1.1. | Protection measures  |  |  |  |  |  |
|        | Measures to prevent fire:  | Keep away from sources of heat and ignition. Do not smoke.   |  |  |  |  |
|        | Measures to prevent aerosol and dust generat   | ion: Secure proper ventilation.  |  |  |  |  |
|        | Measures to protect the environment:   | Prevent spilling into the sewage system and waterways.   |  |  |  |  |
|        | Other measures:  | -  |  |  |  |  |
| 7.1.2. | Advice on general occupational hygiene:  |  |  |  |  |  |
|        | Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating. |  |  |  |  |  |
| 7.2.   | Conditions for safe storage, including any incompatibilities                                     |  |  |  |  |  |
|        | Technical measures and storage conditions:   | Keep in tightly closed and upright set containers in a well ventilated place.  |  |  |  |  |
|        | Packaging materials:   | Manufacturer's original packaging.   |  |  |  |  |
|        | Requirements for storage rooms and vessels:  | Keep away from food and drink. Keep the containers tightly closed.   |  |  |  |  |
|        | Advices for storage equipment:   | The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.          |  |  |  |  |
|        | Further information on storage conditions:   | Do not place the unused material in the storage room<br>and do not use empty containers for storing other<br>chemicals. Do not store with incompatible materials (see<br>Section 9). |  |  |  |  |
| 7.3.   | Specific end use(s)  |  |  |  |  |  |



Marine sediments

Soil (agricultural)

Microorganisms in sewage treatment

Food chain

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|---------------------------------|------------------------------------|-------------|-----------------|--------------------------|---------|-----------|-------------------|---------|------------------------|-------|
| Trading nam                     | ie:                                |             |                 |                          |         | HEMA      | TOXYLIN ML        |         | -                      |       |
| Product cod                     | e:                                 | HEMMI       | OT-X**          | R                        | Revisio | on date:  | 27.03.2023.       |         | Version:               | 9     |
| Dane                            |                                    |             |                 |                          |         |           |                   |         |                        |       |
|                                 |                                    | ndations:   | · c· 1 .·       |                          |         | -         |                   |         |                        |       |
| Indu                            | istriai                            | sector spe  | ecific solutio  | ns:                      |         | -         |                   |         |                        |       |
| SECTION 8. E                    | vnosi                              | ure contr   | ols/nerson:     | al protec                | tion    |           |                   |         |                        |       |
|                                 |                                    | rameters    | ois/persoria    | ii protec                |         |           |                   |         |                        |       |
| 0.1.                            | ti Oi pe                           | iranie ters |                 |                          | 00      | cupation  | al exposure limit |         |                        |       |
| Subs                            | tance                              |             | CAS I           | No                       |         | •         | ort term values   | E       | Biological limit v     | alues |
|                                 |                                    |             |                 |                          |         | ppm       | mg/m³             |         | 9                      |       |
| -                               |                                    |             | -               |                          |         | -         | -                 | No ir   | nformation avail       | able  |
|                                 |                                    |             |                 |                          |         |           |                   |         |                        |       |
| Substance name:                 | Aluminium sulphate octadecahydrate |             |                 |                          |         |           |                   |         |                        |       |
| EC No:                          | C No: 233-135-0 CAS No: 7784-3     |             |                 | 84-31                    | -8      |           |                   |         |                        |       |
| DNEL                            |                                    |             |                 |                          |         |           |                   |         |                        |       |
|                                 |                                    |             |                 |                          | Inc     | dustrial  |                   |         |                        |       |
| Route of                        |                                    | A           | Acute           | Acute                    |         | Chronic   |                   | Chronic |                        |       |
| exposure:                       |                                    | effe        | ect local       | effect syst              |         | temic     | effect local      |         | effect syst            | temic |
| Oral                            |                                    | -           |                 | -                        |         |           | -                 |         | -                      |       |
| Inhalation                      |                                    | -           |                 | -                        |         |           | -                 |         | 13,4 mg/m <sup>3</sup> |       |
| Dermal                          |                                    | -           |                 | -                        |         |           | _                 |         | 3,8 mg/kg bw,          | /day  |
| Critical physic                 | al par                             | ameters:    | solubility, fla | ımmabili                 | ty, cor | rosivity: | -                 |         |                        |       |
|                                 |                                    | _           |                 |                          | Co      | nsumer    |                   |         |                        |       |
| Route of                        |                                    |             | Acute           |                          | Acute   |           | Chronic           |         | Chron                  |       |
| exposure:                       |                                    | effe        | ect local       | effe                     | ct syst | temic     | effect local      |         | effect syst            | temic |
| Oral                            |                                    | -           |                 | -                        |         |           | -                 |         | -                      |       |
| Inhalation -                    |                                    |             | -               |                          |         | -         |                   | -       |                        |       |
| Dermal                          |                                    | -           |                 | -                        |         |           | -                 |         | -                      |       |
| PNEC                            |                                    |             |                 |                          |         |           |                   |         |                        |       |
| Environmental protection target |                                    |             | PNEC            |                          |         |           |                   |         |                        |       |
| Fresh water                     |                                    |             |                 | No information available |         |           |                   |         |                        |       |
| Freshwater sediments            |                                    |             |                 | No information available |         |           |                   |         |                        |       |
| Marine water                    |                                    |             |                 | No information available |         |           |                   |         |                        |       |

No information available

No information available

No information available

No information available



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| Air      |  |   | No information available   |  |  |  |
|----------|--|---|--|--|--|--|
| 8.2.     | Evnocuro controle                                  |   |  |  |  |  |
| 8.2.1.   | Exposure controls                                  |   |  |  |  |  |
| 0.2.1.   | Engineering measures  Substance/mixture relate     | -d  |  |  |  |  |
|          | measures to prevent exp<br>during identified uses: |   | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.  |  |  |  |
|          | Structural measures to preserve:                   | revent  | No information available   |  |  |  |
|          | Organisational measures prevent exposure:          | to  | Organization of work in order to reduce other worker's influence during work process.  |  |  |  |
|          | Technical measures to prexposure:                  | event   | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.   |  |  |  |
| 8.2.2.   | Personal protection equipment                      |   |  |  |  |  |
| 8.2.2.1. | Eye and face protection:                           | Safety glasses that stick to face (preventing splashing) (EN 166) or visor. |  |  |  |  |
| 8.2.2.2. | Skin protection                                    |   |  |  |  |  |
|          | Chem 374. Hand protection:                         |   | emical protection gloves are suitable, which are tested according to EN I.  Glove material: nitrile rubber  Glove thickness: > 0.11 mm  Break through time: >480 min |  |  |  |
|          | I ITHER CRIN PROTECTION:                           |   | ar antistatic clothing made of natural fibers (such as cotton) with long eves (EN 13034), and shoes that cover the entire foot (EN 10335).                           |  |  |  |
| 8.2.2.3. | Respiratory protection:                            | In cas  | se of inadequate ventilation wear respiratory protection.  |  |  |  |
| 8.2.2.4. | Thermal hazards:                                   | No in   | nformation available   |  |  |  |
| 8.2.3.   | Environmental exposure                             | control   | s  |  |  |  |
|          | Substance/mixture relate measures to prevent exp   |   | See Section 6  |  |  |  |
|          | Structural measures to preserve:                   | revent  | Use modern equipment.  |  |  |  |
|          | Organisational measures prevent exposure:          | to  | Adapt the work process to the required working conditions of the workplace. Keep away from drains, surface and ground water.   |  |  |  |
|          | Technical measures to prexposure:                  | event   | See Section 6  |  |  |  |

| SECTIO | SECTION 9. Physical and chemical properties           |  |  |  |  |
|--------|---|--|--|--|--|
| 9.1.   | Information on basic physical and chemical properties |  |  |  |  |
|        | Value Method  |  |  |  |  |



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|     | Physical state:   | liquid                                 | No information available |  |
|-----|---|--|--------------------------|--|
|     | Color:  | dark red                               | No information available |  |
|     | Odour/odour threshold:                                    | glycerol like/no information available | No information available |  |
|     | Melting point / freezing point:                           | No information available               | No information available |  |
|     | Boiling point or initial boiling point and boiling range: | No information available               | No information available |  |
|     | Flammability:   | No information available               | No information available |  |
|     | Lover and upper explosion limit:                          | No information available               | No information available |  |
|     | Flash point:  | No information available               | No information available |  |
|     | Auto-ignition temperature:                                | No information available               | No information available |  |
|     | Decomposition temperature:                                | No information available               | No information available |  |
|     | рН:   | No information available               | No information available |  |
|     | Kinematic viscosity:                                      | No information available               | No information available |  |
|     | Solubility:   | No information available               | No information available |  |
|     | Partition coefficient n-octanol/water (log value):        | No information available               | No information available |  |
|     | Vapour pressure:  | No information available               | No information available |  |
|     | Density and/or relative density                           | No information available               | No information available |  |
|     | Relative vapour density:                                  | No information available               | No information available |  |
|     | Particle characteristics:                                 | No information available               | No information available |  |
| .2. | Other information   |  |                          |  |

| SECTIO | ON 10.: Stability and reactivity    |  |
|--------|-------------------------------------|--|
| 10.1.  | Reactivity:                         | See subsections 10.3 through 10.5.   |
| 10.2.  | Chemical stability:                 | The product is chemically stable under standard ambient conditions of storing and using. |
| 10.3.  | Possibility of hazardous reactions: | No information available.  |
| 10.4.  | Conditions to avoid:                | No information available.  |
| 10.5.  | Incompatible materials:             | No information available.  |
| 10.6.  | Hazardous decomposition products:   | No information available.  |

| SECTIO | DN 11. Toxicological information   |  |  |  |
|--------|--|--|--|--|
| 11.1.  | Information on hazard classes as defined in Regulation (EC) No 1272/2008 |  |  |  |
|        | Acute toxicity:  |  |  |  |



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|              | HEMAT          | OXYLIN ML   |   |   |
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|              | HEMML-OT-X**   |             | HEMML-OT-X** Revision date: 27.03.2023. |   |

| Product code:        | Product code: HEMML-OT-X** Revision date: 27. |                          | 27.03.20  | 023.            | Version: 9   |
|----------------------|---|--------------------------|---|-----------------|--|
| Route of exposure:   | Method  | Species                  | Effective<br>dose<br>LD <sub>50</sub> /LC <sub>50</sub><br>or | Exposui<br>time | re Results   |
| Oral exposure:       | anhydrous (ECHA)                              | rabbit                   | ATE <sub>mixture</sub>  | -               | >2.000-<5.000 mg/kg<br>(aluminium sulphate<br>octadecahydrate) |
| Dermal exposure:     | anhydrous (ECHA)                              | rat                      | LD <sub>50</sub>  | -               | >5.000mg/kg<br>(aluminium sulphate<br>octadecahydrate)         |
| Inhalation exposure: | No information available                      | -                        | LC <sub>50</sub>  | -               | -  |
|                      |   |                          |   |                 |  |
| Specific ta          | rget organ toxicity – singl                   | •                        | 1   |                 |  |
| Specific             |   | effects                  | Target organ  |                 | Note   |
| Oral exposure:       | Oral exposure: No information avai            |                          | No information available                                      |                 | -  |
| Dermal exposure:     | No information avai                           | ilable                   | No information available                                      |                 | -  |
| Inhalation exposure  | e: No information avai                        | ilable                   | No information available                                      |                 | -  |
| Respirator           | y irritation:                                 | No information av        | ailable   |                 |  |
| Irritation a         | and corrosion                                 |                          |   |                 |  |
| l l                  | Exposure time                                 | Species                  | Evaluati<br>on  | Meth<br>od      | Note   |
| Skin irritation:     | -   | -                        | -   | -               |  |
| Eye irritation:      |   | -                        | -   | - C             | auses serious eye damage                                       |
|                      |   |                          |   |                 |  |
| Sensitizati          |   |                          |   |                 |  |
| Dermal exposure:     |   | lo information available |   |                 |  |

| Sensitizati          | on  |
|----------------------|---|
| Dermal exposure:     | No information available  |
| Inhalation exposure: | No information available  |
|                      |   |
| Symptom              | s related to the physical, chemical and toxicological characteristics |
| Oral exposure:       | No information available  |
| Dermal exposure:     | No information available  |
|                      |   |



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| Inhalation expos                            | ure:                     | No informati        | on available                   |                                |                                |                          |        |      |
|---|--------------------------|---------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------|--------|------|
| Eye exposure:                               |                          | Causes serio        | us eye damage                  | 9                              |                                |                          |        |      |
|   |                          |                     |                                |                                |                                |                          |        |      |
| Repeat                                      | ed dos                   | se toxicity (sub    | oacute, subchr                 | onic, chronic)                 |                                |                          |        |      |
|   |                          | Dose                | Exposure<br>time               | Species                        | Method                         | Evaluation               | า      | Note |
| Subacute oral                               | No<br>availa             | information<br>able | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform                | nation | -    |
| Subacute<br>dermal                          | No<br>availa             | information<br>able | No<br>information<br>available | No<br>information<br>available | No information available       | No information available |        | -    |
| Subacute<br>inhalation                      | No<br>availa             | information<br>able | No<br>information<br>available | No<br>information<br>available | No information available       | No inform available      | nation | -    |
| Subchronic<br>oral                          | No<br>availa             | information<br>able | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No information available |        | -    |
| Subchronic<br>dermal                        | No information available |                     | No<br>information<br>available | No<br>information<br>available | No information available       | No information available |        | -    |
| Subchronic inhalation                       | No information available |                     | No<br>information<br>available | No<br>information<br>available | No information available       | No information available |        | -    |
| Chronic oral                                | No<br>availa             | information<br>able | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No information available |        | -    |
| Chronic dermal                              | No<br>availa             | information<br>able | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No information available |        | -    |
| Chronic No information inhalation available |                          |                     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No information available |        | -    |
|   |                          |                     |                                |                                |                                |                          |        |      |
| Specific                                    | targe                    | t organ toxici      | ty – repeated e                | •                              | -                              |                          |        |      |
|   |                          |                     | Specific effect                | :S                             | Target or                      |                          |        | Note |
| Subacute oral                               |                          |                     | tion available                 |                                | No information available       |                          | -      |      |
| Subacute derma                              |                          |                     | tion available                 |                                | No information available       |                          | -      |      |
| Subacute inhalat                            | tion                     |                     | ition available                |                                | No information                 |                          | -      |      |
| Subchronic oral                             |                          | No informa          | ition available                |                                | No information                 | available                | _      |      |



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| Subchro | onic dermal                             | No information avai                          | lable                    | No information available | - |  |  |
|---------|---|--|--------------------------|--------------------------|---|--|--|
| Subchro | onic inhalation                         | No information avai                          | lable                    | No information available | - |  |  |
| Chronic | ronic oral No information avai          |  | lable                    | No information available | - |  |  |
| Chronic | dermal                                  | No information avai                          | lable                    | No information available | - |  |  |
| Chronic | Chronic inhalation No information avail |  | lable                    | No information available | - |  |  |
|         |   |  |                          |                          |   |  |  |
|         | CMR effects (                           | carcinogenicity, mutag                       | enicity, reproduct       | ive toxicity)            |   |  |  |
|         | Carcinogenicity:                        |  | No information           | available                |   |  |  |
|         | Mutagenicity in-vitro:                  |  | No information available |                          |   |  |  |
|         | Genotoxicity:                           |  | No information available |                          |   |  |  |
|         | Mutagenicity in-vivo:                   |  | No information available |                          |   |  |  |
|         | Germ cell mut                           | agenicity:                                   | No information available |                          |   |  |  |
|         | Reproductive                            | toxicity:                                    | No information available |                          |   |  |  |
|         |   |  |                          |                          |   |  |  |
|         | Summary of e                            | valuation of the CMR                         | properties:              | -                        |   |  |  |
|         |   |  |                          |                          |   |  |  |
| 11.2.   | Information on other hazards:           |  |                          |                          |   |  |  |
| 11.2.1. | Endocrine dis                           | rupting properties:                          |                          |                          |   |  |  |
|         | No known properties that                | endocrine disrupt<br>It affect human health. | •                        |                          |   |  |  |
| 11.2.2. | Other informa                           | ations:                                      |                          |                          |   |  |  |
|         |   |  |                          |                          |   |  |  |

| <b>SECTION</b> | 12. Ec | ologica | I inforn | nation |
|----------------|--------|---------|----------|--------|
|----------------|--------|---------|----------|--------|

#### Toxicity 12.1.

| Acute (short-term) toxicity | Dose             | Exposure<br>time | Species Method           |                             | Evaluation   | Note |
|-----------------------------|------------------|------------------|--------------------------|-----------------------------|--|------|
| Fish                        | LC <sub>50</sub> | 96 hours         | Fish                     | ЕСНА                        | >85.9 mg/l<br>(aluminium<br>sulphate<br>octadecahydrate) | -    |
| Crustacea:                  | EC <sub>50</sub> | 48 hours         | aquatic<br>invertebrates | ЕСНА                        | >200 mg/l<br>(aluminium<br>sulphate<br>octadecahydrate)  | -    |
| Algae/aquatic plants        | IC <sub>50</sub> | 8 days           | algae                    | No information<br>available | -  | -    |



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| Microorganisms       | LC <sub>50</sub> | 72 hours         | -                        | -                        | _   | -    |
|----------------------|------------------|------------------|--------------------------|--------------------------|---|------|
| Chronic toxicity     | Dose             | Exposure<br>time | Species                  | Method                   | Evaluation  | Note |
| Fish                 | LC <sub>50</sub> | 96 hours         | No information available | No information available | No information available                                  | -    |
| Crustacea:           | EC <sub>50</sub> | 48 hours         | No information available | No information available | No information available                                  | -    |
| Algae/aquatic plants | IC <sub>50</sub> | 72 hours         | No information available | No information available | No information available                                  | -    |
| Other organisms      | EC <sub>50</sub> | 180 min          | microorganisms           | ECHA                     | >1.000 mg/l<br>(aluminium<br>sulphate<br>octadecahydrate) | -    |

#### Persistence and degradability 12.2.

Abiotic degradation

|                 | Degradation half-lives  | egradation half-lives Method Evaluation |                          | Note |
|-----------------|---|---|--------------------------|------|
| Marine<br>water | No information available No information available No informat |   | No information available | -    |
| Fresh water     | No information available                                      | No information available                | No information available | -    |
| Air             | No information available                                      | No information available                | No information available | -    |
| Soil            | No information available                                      | No information available                | No information available | -    |

Biodegradation

| % Degradation                                     | Time (days) | Method                   | Evaluation               | Note                     |
|---|-------------|--------------------------|--------------------------|--------------------------|
| No information available No information available |             | No information available | No information available | No information available |
|   |             |                          |                          |                          |
|   |             |                          |                          |                          |

#### Bioaccumulative potential 12.3.

Partition coefficient: n-octanol/water (log Kow):

| Malua | Camaantustian            | -11 | ۰,۲ | Mathaad                  | F                        | NI-t- |
|-------|--------------------------|-----|-----|--------------------------|--------------------------|-------|
| Value | Concentration            | рН  | °C  | Method                   | Evaluation               | Note  |
| -     | No information available | -   | -   | No information available | No information available | -     |
|       |                          |     |     |                          |                          |       |
|       |                          |     |     |                          |                          |       |



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| V                        | alue                              |            | Species                              |                        | Meth                   | hod                                  | Eva                    | luation |                          | Not                       | :e                        |  |
|--------------------------|-----------------------------------|------------|--------------------------------------|------------------------|------------------------|--------------------------------------|------------------------|---------|--------------------------|---------------------------|---------------------------|--|
| No information available |                                   | No<br>avai | ·                                    |                        | No inforr<br>available | information No information available |                        |         |                          | No informati<br>available | o information<br>vailable |  |
|                          |                                   |            |                                      |                        |                        |                                      |                        |         |                          |                           |                           |  |
|                          | Chronic                           | ecotox     | icity                                |                        |                        |                                      |                        |         |                          |                           |                           |  |
|                          | Value                             |            | Dose                                 |                        | osure<br>me            | Species                              | Meth                   | od      | Ev                       | aluation                  | Note                      |  |
| Chronic                  | toxicity or                       | n fish     | LC <sub>50</sub>                     | No<br>inforr<br>availa | nation i               | No<br>nformat<br>on<br>available     | No inform<br>available | ation   | No information available |                           | -                         |  |
|                          | toxicity or<br>ea ( <i>Daphni</i> |            | EC <sub>50</sub>                     | No<br>inforr<br>availa | nation i               | No<br>nformat<br>on<br>available     | No inform              | ation   | No info                  | ormation<br>ble           | -                         |  |
|                          |                                   | mation     | icted distribut<br>n available<br>n: | ion in e               | environme              | ntai com                             | partments:             |         |                          |                           |                           |  |
|                          | Value                             |            | °C                                   |                        | Concen                 | tration                              | Meth                   | od      |                          | Note                      |                           |  |
|                          | No<br>informat<br>available       | ion        | No inform<br>available               | nation                 | No inforr<br>available |                                      | No inform available    | ation   | -                        |                           |                           |  |
|                          |                                   |            |                                      |                        |                        |                                      |                        |         |                          |                           |                           |  |
|                          | Adsorpti                          | on / de    | esorption                            |                        |                        |                                      |                        |         |                          |                           |                           |  |
| Transpo                  | ort                               | -          | pefficient<br>s constant             | lo                     | g Kow                  | Evapo                                | ration rate            | М       | lethod                   | N                         | lote                      |  |
| Soil-wa                  | ter No<br>avai                    | lable      | information                          | No in<br>availa        | formation<br>ble       | No info                              | ormation<br>le         | No infa | ormatio<br>ole           | n -                       |                           |  |
| Water-a                  | air No<br>avai                    | lable      | information                          | No in<br>availa        | formation<br>ble       | No info                              | ormation<br>le         | No info | ormation<br>ole          | n -                       |                           |  |
| Soil-air                 | No                                | lable      | information                          | No in availa           | formation              | No info                              | ormation               | No infa | ormatio                  | n _                       |                           |  |



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| 12.5.   | Results of PBT and vPvB assessment  |  |  |  |  |  |
|---------|---|--|--|--|--|--|
| 12.5.   | No information available  |  |  |  |  |  |
|         | The information dvalidate   |  |  |  |  |  |
| 12.6.   | Endocrine disrupting properties   |  |  |  |  |  |
|         | No known endocrine disrupting properties that affect the environment.   |  |  |  |  |  |
| 12.7.   | Other adverse effects   |  |  |  |  |  |
| 12.7.   | No adverse effects are expected.  |  |  |  |  |  |
|         | no auverse effects are expected.  |  |  |  |  |  |
| SECTIO  | N 13. Disposal considerations   |  |  |  |  |  |
| 13.1.   | Waste treatment methods   |  |  |  |  |  |
|         |   |  |  |  |  |  |
| 13.1.1. | Product/Packaging disposal:   |  |  |  |  |  |
|         | Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.  |  |  |  |  |  |
| 13.1.2. | Western de de designations according to Laure   |  |  |  |  |  |
| 13.1.2. | Waste codes/waste designations according to Law:  No information available  |  |  |  |  |  |
|         | NO IIIIOITTIALIOIT AVAIIADIE  |  |  |  |  |  |
| 13.1.3. | Waste treatment – relevant information:   |  |  |  |  |  |
|         | No information available  |  |  |  |  |  |
| 13.1.4. | Sewage disposal – relevant information:   |  |  |  |  |  |
|         | Waste must not be disposed of into the sewage system.   |  |  |  |  |  |
|         |   |  |  |  |  |  |
| 13.1.5. | Other disposal recommendations:   |  |  |  |  |  |
|         | Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur. |  |  |  |  |  |
| 13.1.6. | Relevant Community provisions:  |  |  |  |  |  |
|         | -   |  |  |  |  |  |
| CECT: C |   |  |  |  |  |  |
| SECTIO  | N 14. Transport information   |  |  |  |  |  |



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| Trading name: | HEMATOXYLIN ML |                |             |          |   |
|---------------|----------------|----------------|-------------|----------|---|
| Product code: | HEMML-OT-X**   | Revision date: | 27.03.2023. | Version: | 9 |

| UN number:                    | Not subject to transport regulations. |
|-------------------------------|---------------------------------------|
| UN proper shipping name:      | -                                     |
| Transport hazard class(es):   | -                                     |
| Packing group:                | -                                     |
| Environmentally hazardous:    | -                                     |
| Special precautions for user: | -                                     |
| Transporting/shipment by      | rail (RID)                            |
| UN number:                    | Not subject to transport regulations. |
| UN proper shipping name:      | -                                     |
| Transport hazard class(es):   | -                                     |
| Packing group:                | -                                     |
| Environmentally hazardous:    | -                                     |
| Special precautions for user: | -                                     |
| Inland waterway transpor      | t (ADN)                               |
| UN number:                    | Not subject to transport regulations. |
| UN proper shipping name:      | -                                     |
| Transport hazard class(es):   | -                                     |
| Packing group:                | -                                     |
| Environmentally hazardous:    | -                                     |
| Special precautions for user: | -                                     |
| Transporting/shipment by      | sea (IMDG)                            |
| UN number:                    | Not subject to transport regulations. |
| UN proper shipping name:      | -                                     |
| Transport hazard class(es):   | -                                     |
| Packing group:                | -                                     |
| Environmentally hazardous:    | -                                     |
| Special precautions for user: | -                                     |
| Transporting/shipment by      | air (ICAO-TI/IATA-DGR)                |
| UN number:                    | Not subject to transport regulations. |
| UN proper shipping name:      | -                                     |
| Transport hazard class(es):   | -                                     |
| Packing group:                | -                                     |
| Environmentally hazardous:    | -                                     |
| Special precautions for user: | -                                     |



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| Trading name: | HEMATOXYLIN ML |                |             |          |   |
|---------------|----------------|----------------|-------------|----------|---|
| Product code: | HEMML-OT-X**   | Revision date: | 27.03.2023. | Version: | 9 |

| Further information:     | The product is not subject to classification. |
|--------------------------|---|
| ruftilei illioittiation. | The product is not subject to classification. |

| 15.1. | Safety, health and enviro  | Safety, health and environmental regulations/legislation specific for the substance or mixture   |  |  |  |
|-------|--|--|--|--|--|
|       | EU regulations   |  |  |  |  |
|       | Authorization and/or restrictions of use   |  |  |  |  |
|       | Authorizations:  | -  |  |  |  |
|       | Restrictions:  | -  |  |  |  |
|       |  | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; |  |  |  |
|       | Other EU regulations:  | Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;  |  |  |  |
|       |  | Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work;  |  |  |  |
|       |  | Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;  |  |  |  |
|       |  | REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);  |  |  |  |
|       | Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline) |  |  |  |  |
|       | National legislation:  | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act  |  |  |  |
| 15.2. | Chemical safety assessment   |  |  |  |  |
|       | None   |  |  |  |  |

| SECTION 16. Other information |   |  |  |
|-------------------------------|---|--|--|
| 16.1. Indication of changes:  | - |  |  |



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| Trading name: | HEMATOXYLIN I |                |             | <u> </u> |   |
|---------------|---------------|----------------|-------------|----------|---|
| Product code: | HEMML-OT-X**  | Revision date: | 27.03.2023. | Version: | 9 |

| -  |  |  |
|--|--|--|
| 16.2. Abbreviations and acronyms:          |  | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals  EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative |
| 16.3.                                      | Key literature references and source of data:  | d -  |
| 16.4. Classification and procedure used to |  | e used to derive the classification for mixture according to Regulation (EC)   |
| Classific                                  | cation   | Classification procedure   |
| -  |  | -  |
| 16.5.                                      | Relevant H statements (num   | nber and full text)  |
|  | H: 318   | Causes serious eye damage.   |
|  | 319  | Causes serious eye irritation.   |
| 16.6.                                      | Training advice:   | -  |
| 16.7.                                      | ** "X" in the product code marks different volumes (different packaging the product)  We are not responsible for consequences in case of failure to comply instructions for use or improper use of the product described in this material safety data sheet. |  |

| ANNEX: Exposure scenario resulting to Chemical safety assessment |
|--|
| -  |



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| Trading name: | PERIODIC ACID, 0.8 % SOLUTION |                      |             |            |
|---------------|-------------------------------|----------------------|-------------|------------|
| Product code: | PK08-OT-X**                   | Date of compilation: | 21 Dec 2022 | Version: 4 |

| SECTI | ON 1 IDENTIFICATION (                   | OF THE SUB   | STANCE/MI                        | IXTURE AND OF THE COMPANY/UNDERTAKING   |  |  |
|-------|---|--|----------------------------------|---|--|--|
| 1.1.  | Product identifier                      |  |                                  |   |  |  |
|       | Trading name:                           | PERIODIC   | ACID, 0.8 %                      | SOLUTION  |  |  |
|       | Chemical name:                          | -  |                                  |   |  |  |
|       | Catalogue number:                       | PK08-OT-X**  |                                  |   |  |  |
| 1.2.  | Relevant identified use                 | t identified uses of the substance or mixture and uses advised against |                                  | xture and uses advised against  |  |  |
|       | Uses:                                   |  | For use w                        | ith special staining kits.  |  |  |
|       | Uses advised against:                   |  | Only the i                       | dentified uses are advised.   |  |  |
|       | Reason why uses advis                   | dvised against: med  |                                  | The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes |  |  |
| 1.3.  | Details of the supplier                 | of the safet   | y data sheet                     |   |  |  |
|       | Supplier:                               | ŀ  | BioGnost Ltd.                    |   |  |  |
|       | Address:                                | ı  | Medjugorska 59, Zagreb           |   |  |  |
|       | Telephone number:                       | -  | +385 1 2409997<br>+385 1 2404039 |   |  |  |
|       | Fax no.:                                | -  |                                  |   |  |  |
|       | e-mail of competent p                   | erson: <u>ı</u>  | msds@biognost.hr                 |   |  |  |
|       | National contact:                       | -  | -                                |   |  |  |
| 1.4.  | Emergency telephone                     | number   |                                  |   |  |  |
|       | National Protection an                  | ıd Rescue Di   | rectorate:                       | 112   |  |  |
|       | Medical information: Other information: |  |                                  | +385 1 2348 342   |  |  |
|       |   |  |                                  | -   |  |  |

| SECTIO  | SECTION 2 HAZARDS INFORMATION              |   |                     |  |
|---------|--|---|---------------------|--|
| 2.1.    | Classification of the substance or mixture |   |                     |  |
| 2.1.1.  | Classification (REGULATION (EC) N          | Classification (REGULATION (EC) No. 1272/2008 (CLP) |                     |  |
|         | Hazard class and category                  | code:   | Hazard statements*: |  |
|         | Not identified as hazardous substa         | ance.   | -                   |  |
| 2.1.2.  | Additional information                     |   |                     |  |
|         | -  |   |                     |  |
| *For fu | ll text of Hazard- and EU Hazard-sta       | tements: see Se                                     | ection 16           |  |
| 2.2.    | Classification according to EC Dire        | ective Nr. 1272/                                    | 2008 CLP)           |  |
|         | Product identification:                    | PERIODIC ACI  | D, 0.8 % SOLUTION   |  |
|         | Identification number: -                   |   |                     |  |
|         | Authorization no.:                         | -   |                     |  |
|         | Hazard pictograms:                         | -   |                     |  |



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| Trading name: |             | PERIODIC ACID, 0.8 % SOLUTION |             |            |
|---------------|-------------|-------------------------------|-------------|------------|
| Product code: | PK08-OT-X** | Date of compilation:          | 21 Dec 2022 | Version: 4 |

|      | Signal word:   | -  |
|------|--|----|
|      | Hazard statements:   | -  |
|      | Precautionary statements:  | -  |
|      | Further information:   | -  |
| 2.3. | Other hazards  |    |
|      | Endocrine Disrupting Properties  | s: |
|      | No known endocrine disrupting properties   |    |
|      | <b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance is not a PBT or a vPvB. |    |

| SECTION 3 CO             | SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS |                                |                        |   |  |
|--------------------------|--|--------------------------------|------------------------|---|--|
| CAS/<br>EC/<br>Index no. | REACH<br>Registration No                         | Weight % content<br>(or range) | Identification<br>name | Classification according to Regulation<br>(EC) No 1272/2008 (CLP) |  |
| -                        | _  | -                              | -                      | -   |  |

| SECTIO | TION 4 FIRST AID MEASURES        |   |  |  |
|--------|----------------------------------|---|--|--|
| 4.1.   | Description of first aid measu   | ires  |  |  |
|        | General notes:                   | -   |  |  |
|        | Following inhalation:            | Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician. |  |  |
|        | Following skin contact:          | Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.   |  |  |
|        | Following eye contact:           | Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.  |  |  |
|        | Following ingestion:             | Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention.                                   |  |  |
|        | Self-protection of the first aid | der: Treat symptomatically.   |  |  |
| 4.2.   | Most important symptoms a        | nd effects, both acute and delayed  |  |  |
|        | Following inhalation:            | Inhalation of large amounts of vapors in inadequately ventilated perimete may cause coughing, sneezing, headache and nausea.  |  |  |
|        | Following skin contact:          | Slight irritation. After short exposure, resorption effects are not likely. Long-term exposure may cause drying, cracking and tingling sensation of skin.   |  |  |



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| Trading name: | PERIODIC ACID, 0.8 % SOLUTION |                      |             |          |   |
|---------------|-------------------------------|----------------------|-------------|----------|---|
| Product code: | PK08-OT-X**                   | Date of compilation: | 21 Dec 2022 | Version: | 4 |

|      | Following eye contact:   | Direct eye contact may cause slight to moderate irritation, lacrimation and burning sensation.   |  |
|------|--|--|--|
|      | Following ingestion:   | Swallowing may cause irritation of mucosa, tingling sensation in the mouth, burning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation. |  |
| 4.3. | Indication of any immediate medical attention and special treatment needed |  |  |
|      | -  |  |  |

| SECTIO | ECTION 5 FIREFIGHTING MEASURES  |  |  |
|--------|---|--|--|
| 5.1.   | Extinguishing media   |  |  |
|        | Suitable extinguishing media:  Small fire - water spray, dry powder, CO <sub>2</sub> Large fire - water spray or alcohol-resistant foam                         |  |  |
|        | Unsuitable extinguishing media: water jet   |  |  |
| 5.2.   | Special hazards arising from the substance or mixture   |  |  |
|        | Hazardous combustion products: No information available   |  |  |
| 5.3.   | Advice for firefighters   |  |  |
|        | Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.  Cool closed containers exposed to fire with water spray or vapor. |  |  |
| 5.4.   | Additional information  |  |  |
|        | Remove sources of heat and ignition.  Do not contaminate the environment with extinguishing media.  |  |  |

| SECTIO | SECTION 6 ACCIDENTAL RELEASE MEASURES   |  |  |  |
|--------|---|--|--|--|
| 6.1.   | Personal precautions, protective equipment and emergency procedures   |  |  |  |
| 6.1.1. | For non-emergency personnel   |  |  |  |
|        | Protective equipment:   | Use personal protective equipment (see Section 8).   |  |  |
|        | Accident prevention methods:  | Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke. |  |  |
|        | Emergency procedures:   | Mark the area using proper signs.  |  |  |
| 6.1.2. | For emergency responders:   |  |  |  |
|        | Wear protective equipment (see Secti  | on 8).   |  |  |
| 6.2.   | Environmental precautions:  |  |  |  |
|        | Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112. |  |  |  |
| 6.3.   | Methods and material for containmer   | nt and cleaning up   |  |  |



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| Trading name: |             | PERIODIC ACID, 0.8 % SOLUTION |             |            |
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| 6.3.1. | Bunding, covering of drains; capping procedures: | Sand or clay barriers.  |
|--------|--|---|
| 6.3.2. | Cleaning up:                                     | Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water. |
| 6.3.3. | Other information:                               | -   |
| 6.4.   | Reference to other sections                      |   |
|        | -  |   |

| SECTIO | TION 7 HANDLING AN STORAGE   |  |   |  |
|--------|--|--|---|--|
| 7.1.   | Precautions for safe handling  |  |   |  |
| 7.1.1. | 1. Protection measures   |  |   |  |
|        | Measures to prevent fire:  | i  | Keep away from sources of heat and ignition. Do not smoke.  |  |
|        | Measures to prevent aerosol and dust generati  | on: S  | Secure proper ventilation.  |  |
|        | Measures to protect the environment:   |  | Prevent spilling into the sewage system and waterways.  |  |
|        | Other measures:  | -  | -   |  |
| 7.1.2. | Advice on general occupational hygiene:  |  |   |  |
|        | Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating. |  | hly wash hands after work and before eating.  |  |
| 7.2.   | Conditions for safe storage, including any inco  | mpatibi  | lities  |  |
|        | Technical measures and storage conditions:   | ventil   | in tightly closed and upright set containers in a well<br>ated storage rooms, and away from sources of heat,<br>ght, and other incompatible substances.             |  |
|        | Packaging materials:   | Manufacturer's original packaging.   |   |  |
|        | Requirements for storage rooms and vessels:  | Keep away from food and drink. Keep the containers tightly closed.  The storage must be made of hard material; floors mube resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation. |   |  |
|        | Advices for storage equipment:   |  |   |  |
|        | Further information on storage conditions:   | and d  | ot place the unused material in the storage room<br>lo not use empty containers for storing other<br>icals. Do not store with incompatible materials (see<br>on 9). |  |
| 7.3.   | Specific end use(s)  |  |   |  |



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| Trading name: |             |                      |             |            |  |
|---------------|-------------|----------------------|-------------|------------|--|
| Product code: | PK08-OT-X** | Date of compilation: | 21 Dec 2022 | Version: 4 |  |

| Recommendations:                      | - |
|---------------------------------------|---|
| Industrial sector specific solutions: | - |

| SECTION 8 FX                       | SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION |           |                 |                 |  |                          |              |       |                         |                  |  |
|------------------------------------|---|-----------|-----------------|-----------------|--|--------------------------|--------------|-------|-------------------------|------------------|--|
| 8.1. Control parameters            |   |           |                 |                 |  |                          |              |       |                         |                  |  |
| Substance                          |   |           |                 |                 | upational exposure limit<br>lues/short term values |                          |              | Bio   | Biological limit values |                  |  |
|                                    |   |           |                 |                 |  | ppm                      | mg/m³        |       |                         |                  |  |
| -                                  |   |           | -               |                 |  | -                        | - No infor   |       | No infor                | mation available |  |
|                                    |   |           |                 |                 |  |                          |              |       |                         |                  |  |
| Substance name:                    | -   |           |                 |                 |  |                          |              |       |                         |                  |  |
| EC No:                             | _   |           | CAS No:         | _               |  |                          |              |       |                         |                  |  |
| DNEL                               |   |           |                 |                 |  |                          |              |       |                         |                  |  |
|                                    |   |           |                 |                 | Inc  | lustrial                 |              |       |                         |                  |  |
| Route of                           |   | A         | Acute           |                 | Acut   | e                        |              | Chron | ic                      | Chronic          |  |
| exposure:                          |   | effe      | ect local       | effe            | ct sys   | temic                    | effect local |       | ocal                    | effect systemic  |  |
| Oral                               |   | -         |                 | -               |  |                          | -            |       |                         | -                |  |
| Inhalation                         |   | -         |                 | -               |  |                          | -            |       |                         | -                |  |
| Dermal -                           |   |           | -               |                 |  | -                        |              |       | -                       |                  |  |
| Critical physic                    | al parar  | neters: s | solubility, fla | mmabilit        | ty, cor  | rosivity:                |              | -     |                         |                  |  |
|                                    |   | 1         |                 | T               | Coı  | nsumer                   |              |       |                         |                  |  |
| Route of                           |   |           | Acute           | Acute           |  |                          | Chronic      |       |                         | Chronic          |  |
| exposure:                          |   | effe      | ect local       | effect systemic |  | temic                    | effect local |       | ocal                    | effect systemic  |  |
| Oral                               |   | -         |                 | -               |  |                          | -            |       |                         | -                |  |
| Inhalation                         |   | -         |                 | -               |  |                          | -            |       |                         | -                |  |
| Dermal                             |   | -         |                 | -               |  |                          | -            |       |                         | -                |  |
| PNEC                               |   |           |                 |                 |  | 2012                     |              |       |                         |                  |  |
| Environmenta                       | I proted  | tion tar  | get             |                 |  | PNEC                     |              |       |                         |                  |  |
| Fresh water                        |   |           |                 |                 |  | No information available |              |       |                         |                  |  |
| Freshwater sediments               |   |           |                 |                 |  | No information available |              |       |                         |                  |  |
| Marine water                       |   |           |                 |                 | No information available                           |                          |              |       |                         |                  |  |
| Marine sediments                   |   |           |                 |                 | No information available                           |                          |              |       |                         |                  |  |
| Food chain                         |   |           |                 |                 | No information available                           |                          |              |       |                         |                  |  |
| Microorganisms in sewage treatment |   |           |                 |                 | No information available                           |                          |              |       |                         |                  |  |
| Soil (agricultural)                |   |           |                 |                 | No information available                           |                          |              |       |                         |                  |  |



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| Trading name: | PERIODIC ACID, 0.8 % SOLUTION |                      |             |          |   |
|---------------|-------------------------------|----------------------|-------------|----------|---|
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| Air      |  |   | No information available   |  |  |  |  |
|----------|--|---|--|--|--|--|--|
| 8.2.     | Exposure controls  |   |  |  |  |  |  |
| 8.2.1.   | Engineering measures   |   |  |  |  |  |  |
|          | Substance/mixture relate measures to prevent expeduring identified uses: |   | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.            |  |  |  |  |
|          | Structural measures to prexposure:                                       | event   | No information available   |  |  |  |  |
|          | Organisational measures prevent exposure:                                | to  | Organization of work in order to reduce other worker's influence during work process.  |  |  |  |  |
|          | Technical measures to pr exposure:                                       | event   | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.                             |  |  |  |  |
| 8.2.2.   | Personal protection equip  | oment   |  |  |  |  |  |
| 8.2.2.1. | Eye and face protection:   |   | Safety glasses that stick to face (preventing splashing) (EN 166) or visor.  |  |  |  |  |
| 8.2.2.2. | Skin protection  |   |  |  |  |  |  |
|          |  |   | ective gloves must be according to the EU Directive 2016/425/EEC and dard EN 374.  Glove material: nitrile rubber                    |  |  |  |  |
|          |  |   | Glove thickness: ≥0.50 mm<br>Break through time: >480 min  |  |  |  |  |
|          | Other skin protection:   |   | antistatic clothing made of natural fibers (such as cotton) with long s (EN 13034), and shoes that cover the entire foot (EN 10335). |  |  |  |  |
| 8.2.2.3. | Respiratory protection:  | Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI. |  |  |  |  |  |
| 8.2.2.4. | Thermal hazards:   | No inf  | ormation available   |  |  |  |  |
| 8.2.3.   | Environmental exposure   | controls  |  |  |  |  |  |
|          | Substance/mixture relate measures to prevent expe                        |   | See Section 6  |  |  |  |  |
|          | Structural measures to prexposure:                                       | event   | Use modern equipment.  |  |  |  |  |
|          | Organisational measures prevent exposure:                                | to  | Adapt the work process to the required working conditions of the workplace.  |  |  |  |  |
|          | Technical measures to pr exposure:                                       | event   | See Section 6  |  |  |  |  |

#### **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**



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| Trading name: | PERIODIC ACID, 0.8 % SOLUTION |                      |             |          |   |
|---------------|-------------------------------|----------------------|-------------|----------|---|
| Product code: | PK08-OT-X**                   | Date of compilation: | 21 Dec 2022 | Version: | 4 |

|   | Value                            | Method                   |  |
|---|----------------------------------|--------------------------|--|
| Physical state:   | liquid                           | No information available |  |
| Colour:   | colourless                       | No information available |  |
| Odour/odour threshold:                                    | no odor/no information available | No information available |  |
| Melting point / freezing point:                           | No information available         | No information available |  |
| Boiling point or initial boiling point and boiling range: | No information available         | No information available |  |
| Flammability:   | No information available         | No information available |  |
| Lover and upper explosion limit:                          | No information available         | No information available |  |
| Flash point:  | No information available         | No information available |  |
| Auto-ignition temperature:                                | No information available         | No information available |  |
| Decomposition temperature:                                | No information available         | No information available |  |
| pH:   | No information available         | No information available |  |
| Kinematic viscosity:                                      | No information available         | No information available |  |
| Solubility:   | No information available         | No information available |  |
| Partition coefficient n-octanol/water (log value):        | No information available         | No information available |  |
| Vapour pressure:  | No information available         | No information available |  |
| Density and/or relative density:                          | No information available         | No information available |  |
| Relative vapour density:                                  | No information available         | No information available |  |
| Particle characteristics:                                 | No information available         | No information available |  |

| SECTIO | SECTION 10 STABILITY AND REACTIVITY |  |  |  |  |  |
|--------|-------------------------------------|--|--|--|--|--|
| 10.1.  | Reactivity:                         | See subsections 10.3 through 10.5.   |  |  |  |  |
| 10.2.  | Chemical stability:                 | The product is chemically stable under standard ambient conditions of storing and using. |  |  |  |  |
| 10.3.  | Possibility of hazardous reactions: | With strong oxidants, sodium-hydroxide, sulfuric acid, aluminum.                         |  |  |  |  |
| 10.4.  | Conditions to avoid:                | Sources of heat, sparks, and ignition.   |  |  |  |  |
| 10.5.  | Incompatible materials:             | Aluminum.  |  |  |  |  |
| 10.6.  | Hazardous decomposition products:   | No information available.  |  |  |  |  |

#### **SECTION 11 TOXICOLOGICAL INFORMATION**



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| Trading name: | PERIODIC ACID, 0.8 % SOLUTION |                      |             |            |  |
|---------------|-------------------------------|----------------------|-------------|------------|--|
| Product code: | PK08-OT-X**                   | Date of compilation: | 21 Dec 2022 | Version: 4 |  |

|                      |  | 1                                   | :   |               |          | :                 |  |  |
|----------------------|--|-------------------------------------|---|---------------|----------|-------------------|--|--|
| 11.1. Informatio     | n on hazard classes as                                 | defined in Reg                      | ulation (EC) No 12  | 72/2008       |          |                   |  |  |
| Route of exposure:   | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ |                                     |   |               |          | Results           |  |  |
| Oral exposure:       | No information available                               | _                                   | LD <sub>50</sub>  | -             |          |                   |  |  |
| Dermal exposure:     | No information<br>available                            | -                                   | LD <sub>50</sub>  | -             |          | -                 |  |  |
| Inhalation exposure: | No information available                               | -                                   | LC <sub>50</sub>  | _             |          | -                 |  |  |
| Specific ta          | rget organ toxicity – si                               | ngle exposure (                     | STOT SE):   |               |          |                   |  |  |
|                      | Specifi  | c effects                           | Targe   | t organ       |          | Note              |  |  |
| Oral exposure:       | No information a                                       | available                           | No informati  | on available  | -        |                   |  |  |
| Dermal exposure:     | No information a                                       | available                           | No informati  | on available  | -        |                   |  |  |
| Inhalation exposure  | e: No information a                                    | available                           | No informati  | on available  | -        |                   |  |  |
|                      | y irritation:<br>nd corrosion                          | No info                             | rmation available   |               |          |                   |  |  |
| 11110000110          | Exposure time  | Species                             | Evaluation  | Method        |          | Note              |  |  |
| Skin irritation:     | -  | rabbit                              | -   |               |          |                   |  |  |
| Eye irritation:      | -  | rabbit                              | -   |               |          |                   |  |  |
| Sensitizatio         | on   |                                     |   |               |          |                   |  |  |
| Dermal exposure:     | No information avail                                   | able                                |   |               |          |                   |  |  |
| Inhalation exposure: | No information available                               | able                                |   |               |          |                   |  |  |
| Symptoms             | related to the physica                                 | l, chemical and                     | toxicological chara   | acteristics   |          |                   |  |  |
| Oral exposure:       | sensation; higher                                      | evels of concer<br>g, aspiration ca | of mucosa, tingling<br>ntration may cause<br>uses coughing, diff<br>tion. | nausea, abdoi | minal pa | ain and vomiting. |  |  |
| Dermal exposure:     |  |                                     | ure, resorption effe<br>ingling sensation o                               |               | ely. Lon | g-term exposure   |  |  |



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| Trading name: | PERIODIC ACID, 0.8 % SOLUTION |                      |             |          |   |
|---------------|-------------------------------|----------------------|-------------|----------|---|
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| Inhalation expos         | IIro:                  |           | large amount<br>eezing, heada  |                                |        | dequately vent                 | ilated perimete                | r may cause |
|--------------------------|------------------------|-----------|--------------------------------|--------------------------------|--------|--------------------------------|--------------------------------|-------------|
| Eye exposure:            | Direc<br>sensa         | -         | ontact may cau                 | se slight to                   | mode   | erate irritation,              | lacrimation and                | burning     |
| Repeate                  | ed dose toxic          | ity (sub  | acute, subchro                 | onic, chroni                   | c)     |                                |                                |             |
|                          | Dose                   |           | Exposure time                  | Species                        |        | Method                         | Evaluation                     | Note        |
| Subacute oral            | No inforr<br>available | mation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Subacute<br>dermal       | No inforr<br>available | nation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Subacute<br>inhalation   | No inforr<br>available | nation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Subchronic oral          | No inforr<br>available | mation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Subchronic<br>dermal     | No inforr<br>available | nation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Subchronic<br>inhalation | No inforr<br>available | nation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Chronic oral             | No inforr<br>available | nation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Chronic dermal           | No inforr<br>available | nation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Chronic<br>inhalation    | No inforr<br>available | mation    | No<br>information<br>available | No<br>information<br>available | on     | No<br>information<br>available | No<br>information<br>available | -           |
| Specific                 | target organ           | n tovicit | y – repeated e                 | vnosuro (S                     | TOT D  | Ε).                            |                                |             |
| Specific                 | target organ           |           | pecific effects                | vhosnie (2                     | 101 10 | Target org                     | an                             | Note        |
| Subacute oral            | No                     |           | ation available                |                                | No ir  | oformation ava                 |                                |             |
| Subacute derma           |                        |           | ntion available                |                                |        | formation ava                  |                                |             |
| Subacute inhalat         | ion No                 | informa   | ntion available                |                                |        |                                |                                |             |



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|---------------|-------------------------------|----------------------|-------------|------------|--|
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|         |   |  |                | *************************************** |                   |            |            |                 |
|---------|---|--|----------------|---|-------------------|------------|------------|-----------------|
| Subchro | onic oral   | No information   | n available    |   | No informatio     | n availabl | e          | _               |
| Subchro | onic dermal   | No information   | n available    |   | No informatio     | n availabl | e          | _               |
| Subchro | onic inhalation   | No information   | n available    |   | No informatio     | n availabl | e          | -               |
| Chronic | ic oral No information available  |  |                |   | No informatio     | n availabl | e          | -               |
| Chronic | dermal  | No information   | n available    |   | No informatio     | n availabl | e          | -               |
| Chronic | inhalation  | No information   | n available    |   | No informatio     | n availabl | e          | -               |
|         | CMR effects (c  | carcinogenicity, m   | utagenicity, r | reproduct                               | ive toxicity)     |            |            |                 |
|         | Carcinogenicit  |  |                |   |                   | not indica | ate carcin | ogenic effects. |
|         | Mutagenicity i  |  |                | s did not ind                           |                   |            |            |                 |
|         | Genotoxicity:   | No informa   |                |   |                   | - 9        |            |                 |
|         | Mutagenicity i  | Current <i>in vivo</i> tests did not indicate mutagenic effects. |                |   |                   |            |            |                 |
|         | Germ cell mut   | No informa   |                |   |                   |            |            |                 |
|         | Reproductive toxicity:  No toxicity on reproductive organs was determined in reorgans.  |  |                |   | ed in reproductiv |            |            |                 |
| 11.2    |   | valuation of the (   | CMR propertion | es: -                                   |                   |            |            |                 |
| 11.2.1. |   | upting properties  |                |   |                   |            |            |                 |
|         | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |  |                |   |                   |            |            |                 |
| 11.2.2. | Other informa   | tions:   |                |   |                   |            |            |                 |
|         |   |  |                |   |                   |            |            |                 |

| SECTION 12 ECOLOGICAL INFORMATION: |  |          |                          |                                |   |   |  |  |
|------------------------------------|--|----------|--------------------------|--------------------------------|---|---|--|--|
| 12.1. Toxicity                     |  |          |                          |                                |   |   |  |  |
| Acute toxicity                     | Acute toxicity Dose Exposure time Species Method Evaluation Note |          |                          |                                |   |   |  |  |
| Fish                               | LC <sub>50</sub>   | 96 hours | No information available | No<br>information<br>available | - | - |  |  |



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|---------------|-------------------------------|----------------------|-------------|----------|---|--|--|
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| Crustacea:           | EC <sub>50</sub> | 48 hours         | No information available | No<br>information<br>available | -                              | -    |
|----------------------|------------------|------------------|--------------------------|--------------------------------|--------------------------------|------|
| Algae/aquatic plants | IC <sub>50</sub> | 8 days           | No information available | No<br>information<br>available | -                              | -    |
| Microorganisms       | LC <sub>50</sub> | 72 hours         | -                        | -                              | -                              | -    |
| Chronic toxicity     | Dose             | Exposure<br>time | Species                  | Method                         | Evaluation                     | Note |
| Fish                 | LC <sub>50</sub> | 96 hours         | No information available | No information available       | No<br>information<br>available |      |
| Crustacea:           | EC <sub>50</sub> | 48 hours         | No information available | No<br>information<br>available | No<br>information<br>available | -    |
| Algae/aquatic plants | IC <sub>50</sub> | 72 hours         | No information available | No<br>information<br>available | No<br>information<br>available | -    |
| Other organisms      | _                | _                | _                        | _                              | _                              | _    |

#### 12.2. Persistence and degradability

Abiotic degradation

|                 | Degradation half-lives   | Method                   | Evaluation               | Note |
|-----------------|--------------------------|--------------------------|--------------------------|------|
| Marine<br>water | No information available | No information available | No information available | -    |
| Fresh water     | No information available | No information available | No information available | -    |
| Air             | No information available | No information available | No information available | -    |
| Soil            | No information available | No information available | No information available | -    |

| Biodegra                 | Biodegradation           |                          |                          |                          |  |  |  |  |  |  |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|--|--|--|--|--|
| % Degradation            | Time (days)              | Method                   | Evaluation               | Note                     |  |  |  |  |  |  |
| No information available |  |  |  |  |  |  |
|                          |                          |                          |                          |                          |  |  |  |  |  |  |
|                          |                          |                          |                          |                          |  |  |  |  |  |  |

| 12.3. | Bioaccumulative potential                         |  |  |  |  |  |  |  |
|-------|---|--|--|--|--|--|--|--|
|       | Partition coefficient: n-octanol/water (log Kow): |  |  |  |  |  |  |  |
| Valu  | Value Concentration pH °C Method Evaluation Note  |  |  |  |  |  |  |  |



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| Tradin  | g name:                                   | •             |                               |                     | PER                    | IODIC                  | ACID,                   | 0.8 %                   | SOLUT                    | ION      |                        |        |
|---------|---|---------------|-------------------------------|---------------------|------------------------|------------------------|-------------------------|-------------------------|--------------------------|----------|------------------------|--------|
| Produc  | ct code:                                  | PK            | 08-OT-X*                      | ·*                  | Date                   | e of co                | mpilati                 | on: 2                   | 21 Dec                   | 2022     | Versi                  | on: 4  |
| -       | N<br>av                                   | o info        | ormation                      | -                   |                        | No info                | ormation<br>le          |                         | inform<br>ailable        | ation    | -                      |        |
|         |   |               |                               |                     |                        |                        |                         |                         |                          |          |                        |        |
|         | Biocon                                    | centratio     | on factor (                   | BCF)                |                        |                        |                         |                         |                          |          | 1                      |        |
| V       | /alue                                     |               | Speci                         | es                  | 1                      | Method                 | k                       | E                       | valuatio                 | on       |                        | Note   |
| No info | ormation<br>le                            | No<br>ava     | in <sup>.</sup><br>ilable     | formatio            | n No info<br>availab   |                        | on                      | No inf<br>availal       | formation<br>ble         | on       | No inforr<br>available | mation |
|         | Chronic                                   | c ecotox      | icitv                         |                     |                        |                        |                         |                         |                          |          |                        |        |
|         | Value                                     |               | Dos                           | se E                | xposure<br>time        | Spo                    | ecies                   | Met                     | hod                      | Eva      | luation                | Note   |
| Chronic | Chronic toxicity on fish LC <sub>50</sub> |               | 1                             | ormation<br>ailable | No<br>infori<br>availa | mation<br>able         | No<br>inform<br>availal |                         | No information available |          | -                      |        |
|         | c toxicity<br>ea ( <i>Daph</i>            |               | EC <sub>50</sub>              | 1                   | ormation<br>ailable    | No<br>infori<br>availa | mation<br>able          | No<br>inform<br>availal |                          | No info  | ormation<br>ble        | -      |
| 12.4.   | Mobilit                                   | ty in soil    |                               |                     |                        |                        |                         |                         |                          |          |                        |        |
|         | 1   |               | icted distr                   | ibution ir          | n environm             | nental d               | compart                 | ments:                  |                          |          |                        |        |
|         |   |               | available                     |                     |                        |                        |                         |                         |                          |          |                        |        |
|         | Surface                                   | e tensior     | 1:                            |                     |                        |                        |                         |                         |                          |          |                        |        |
|         | Val                                       | ue            | °C                            |                     | Concentra              | ation                  |                         | Meth                    | od                       |          | N                      | ote    |
|         | No<br>informa<br>availab                  | ation         | No<br>informatio<br>available | าก                  | lo informa<br>vailable | ition                  | No infavailat           | ormatic<br>ole          | on                       | -        |                        |        |
|         |   |               |                               |                     |                        |                        |                         |                         |                          |          |                        |        |
|         | Adsorn                                    | otion / de    | esorption                     |                     |                        |                        |                         |                         |                          |          |                        |        |
| Transpo | -   | A/D c         | oefficient<br>s constant      |                     | log Kow                | Ev                     | /aporati                | on rate                 |                          | Method   |                        | Note   |
| Soil-wa | ater N                                    | 0<br>vailable | informat                      |                     | information            |                        | o inform                | ation                   | No ir                    | nformati | on -                   |        |



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|---------------|-------------------------------|----------------------|-------------|------------|--|--|
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|               |                               |                      |             |            |  |  |

|          | t code.   | 0 01 X         | Date 0.                  | compliation. 2           | T Dec 2022               | version. 4                               |  |
|----------|---|----------------|--------------------------|--------------------------|--------------------------|--|--|
| Water-a  | ir No<br>available  | information    | No information available | No information available | No information available | -  |  |
| Soil-air | No<br>available   | information    | No information available | No information available | No information available | -  |  |
|          |   |                |                          |                          |                          |  |  |
| 12.5.    | Results of PBT ar   |                |                          |                          |                          |  |  |
|          | according to REA  | ACH Article 5  | •                        | n Delegated regula       | to have endocrine o      | disrupting properties<br>0 or Commission |  |
| 12.6.    | Endocrine disrup  | oting properti | es                       |                          |                          |  |  |
|          | The substance/mixture does not contain components considered to have endocrine disrupting proper according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |                |                          |                          |                          |  |  |
| 12.7.    | Other adverse effects   |                |                          |                          |                          |  |  |
|          | No information a  | available      |                          |                          |                          |  |  |
|          |   |                |                          |                          |                          |  |  |
| SECTIO   | N 13 DISPOSAL (   | CONSIDERAT     | TIONS                    |                          |                          |  |  |
| 13.1.    | Waste treatme   | ent methods    |                          |                          |                          |  |  |
|          |   |                |                          |                          |                          |  |  |
| 13.1.1.  | Product/Packa   | ging disposa   | :                        |                          |                          |  |  |
|          | Submit for disp<br>Protection.  | posal to the l | egal person autho        | rized by the Minist      | ry of Environmenta       | l and Nature                             |  |
| 13.1.2.  | Waste codes/v   | waste designa  | tions according to       | Law:                     |                          |  |  |
|          | No information  |                |                          |                          |                          |  |  |
|          |   |                |                          |                          |                          |  |  |
| 13.1.3.  | Waste treatme   | ent – relevant | information:             |                          |                          |  |  |
|          | No information  | n available    |                          |                          |                          |  |  |
| 13.1.4.  | Sewage dispos   | sal – relevant | information:             |                          |                          |  |  |
|          |   |                | d of into the sewa       | ge system.               |                          |  |  |
| 12.15    | Oth I'  | l              | - <b>.</b>               |                          |                          |  |  |
| 13.1.5.  | Other disposal  | recommend      | ations:                  |                          |                          |  |  |



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|         | authorized by the minist  | roduct's remains into the sewage system. Submit the remains to the collectors cry in charge. Do not dispose of the packaging into the sewage system. Submit electors authorized by the ministry in charge. Do not dispose of in places where |
|---------|---------------------------|--|
| 13.1.6. | Relevant Community pro    | ovisions:  |
|         | -                         |  |
|         |                           |  |
| SECTIO  | N 14 TRANSPORT INFORI     | MATION   |
|         | Transporting/shipment by  | road (ADR)   |
| UN num  |                           | Not subject to transport regulations.  |
| UN pro  | per shipping name:        |  |
|         | ort hazard class(es):     | -  |
| Packing |                           | -  |
| ······  | mentally hazardous:       | -  |
|         | precautions for user:     | -  |
| •       | Transporting/shipment by  | rail (RID)   |
| UN nun  |                           | Not subject to transport regulations.  |
| UN pro  | per shipping name:        |  |
| Transpo | ort hazard class(es):     | -  |
| Packing | group:                    | -  |
| Environ | mentally hazardous:       | -  |
| Special | precautions for user:     | -  |
|         | Inland waterway transport | (ADN)  |
| UN num  | nber:                     | Not subject to transport regulations.  |
| UN proj | per shipping name:        | -  |
| Transpo | ort hazard class(es):     | -  |
| Packing | group:                    | -  |
| Environ | mentally hazardous:       | -  |
| Special | precautions for user:     | -  |
|         | Transporting/shipment by  | sea (IMDG)   |
| UN num  | nber:                     | Not subject to transport regulations.  |
| UN proj | per shipping name:        | -  |
| Transpo | ort hazard class(es):     | -  |
| Packing | group:                    | -  |
| Environ | mentally hazardous:       | -  |
| Special | precautions for user:     |  |



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| Trading name: |             | PERIODIC ACID, 0.8   | % SOLUTION  |            |
|---------------|-------------|----------------------|-------------|------------|
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| UN number:                    | Not subject to transport regulations. |
|-------------------------------|---------------------------------------|
| UN proper shipping name:      | -                                     |
| Transport hazard class(es):   | -                                     |
| Packing group:                | -                                     |
| Environmentally hazardous:    | -                                     |
| Special precautions for user: | -                                     |
|                               |                                       |

| 5.1. Safety, health and enviro | nmental regulations/legislation specific for the substance or mixture   |
|--------------------------------|---|
| EU regulations                 |   |
| Authorization and/or res       | trictions of use  |
| Authorizations:                | -   |
| Restrictions:                  | -   |
| Other EU regulations:          | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC;  Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;  Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work;  Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;  REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); |



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|---------------|-------------------------------|----------------------|-------------|------------|--|
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|       | National legislation:    | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act |
|-------|--------------------------|---|
| 15.2. | Chemical safety assessme | ent   |
|       | None                     |   |

| SECTIO   | ON 16 Other information  |   |  |  |  |
|----------|--|---|--|--|--|
| 16.1.    | Indication of changes:   | -   |  |  |  |
| 16.2.    | Abbreviations and acronyms:  | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative |  |  |  |
| 16.3.    | Key literature references and source of data:  | -   |  |  |  |
| 16.4.    | Classification and procedure us<br>1272/2008 (CLP)                                   | sed to derive the classification for mixture according to Regulation (EC)   |  |  |  |
| Classifi | ication  | Classification procedure  |  |  |  |
| -        | -  |   |  |  |  |
| 16.5.    | Relevant H statements (number  | er and full text)   |  |  |  |
|          | H: -   |   |  |  |  |
| 16.6.    | Training advice:   |   |  |  |  |
| 16.7.    | ** "X" in the product code marks different volumes (different packaging the product) |   |  |  |  |

| Λ | N | N | П | ᆮ | Y |  |
|---|---|---|---|---|---|--|
| _ |   | н | ч | ᆫ | Л |  |

**Exposure scenario resulting to Chemical safety assessment** 

-



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| Trading name: | SODIUM METABISULFITE, SOLUTION |                |             |          |   |  |  |
|---------------|--------------------------------|----------------|-------------|----------|---|--|--|
| Product code: | NM-OT-X**                      | Revision date: | 21 Dec 2022 | Version: | 4 |  |  |

| 1.1. | ON 1: Identification of Product identifier   | ine substa                                       | nce/mixture a   | and of the company/undertaking |  |  |  |
|------|--|--|---|--------------------------------|--|--|--|
| 1.1. |  | CODILIN  | 4   | TE COLLITION                   |  |  |  |
|      | Trading name:  | SODION   | M METABISULFITE, SOLUTION   |                                |  |  |  |
|      | Chemical name:   | -  | -   |                                |  |  |  |
|      | Catalogue number:  | NM-OT-   | -X**  |                                |  |  |  |
| 1.2. | Relevant identified us   | es of the su                                     | ubstance or mi  | xture and uses advised against |  |  |  |
|      | Uses:  |  | For use w   | ith special staining kits.     |  |  |  |
|      | Uses advised against:  | Uses advised against:                            |   | dentified uses are advised.    |  |  |  |
|      | Reason why uses advised against:   |  | The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes |                                |  |  |  |
| 1.3. | Details of the supplier  | Details of the supplier of the safety data sheet |   |                                |  |  |  |
|      | Supplier: Bio  |  | BioGnost Ltd.   | ioGnost Ltd.                   |  |  |  |
|      | Address: M   |  |   |                                |  |  |  |
|      | Address:   |  | Medjugorska   | 59, Zagreb                     |  |  |  |
|      | Address:  Telephone number:  |  | Medjugorska<br>+385 1 24099   |                                |  |  |  |
|      |  |  |   | 997                            |  |  |  |
|      | Telephone number:  | person:  | +385 1 24099  | 997<br>939                     |  |  |  |
|      | Telephone number:<br>Fax no.:  | person:  | +385 1 24099<br>+385 1 24040  | 997<br>939                     |  |  |  |
| 1.4. | Telephone number: Fax no.: e-mail of competent   |  | +385 1 24099<br>+385 1 24040  | 997<br>939                     |  |  |  |
| 1.4. | Telephone number: Fax no.: e-mail of competent   National contact:                     | number   | +385 1 24099<br>+385 1 24040<br>msds@biogno   | 997<br>939                     |  |  |  |
| 1.4. | Telephone number: Fax no.: e-mail of competent   National contact: Emergency telephone | number   | +385 1 24099<br>+385 1 24040<br>msds@biogno   | 997<br>939<br>ost.hr           |  |  |  |

| SECTION 2. Hazards identification |                                   |                            |                     |  |  |  |  |
|-----------------------------------|-----------------------------------|----------------------------|---------------------|--|--|--|--|
| SECTIO                            | SECTION 2. Hazards identification |                            |                     |  |  |  |  |
| 2.1.                              | Classification of the substan     | ce or mixture              |                     |  |  |  |  |
| 2.1.1.                            | Classification according to R     | Regulation (EC) No 1272/20 | 08 (CLP)            |  |  |  |  |
|                                   | Hazard class and                  | category code:             | Hazard statements*: |  |  |  |  |
|                                   | Eye Irr. 2 H319                   |                            |                     |  |  |  |  |
| 2.1.2.                            | Additional information            | Additional information     |                     |  |  |  |  |
|                                   | -                                 |                            |                     |  |  |  |  |
| *For fu                           | ll text of Hazard- and EU Hazar   | rd-statements: see Section | 16                  |  |  |  |  |
| 2.2.                              | Label elements                    |                            |                     |  |  |  |  |
|                                   | Product identification:           | SODIUM METABISUL           | FITE, SOLUTION      |  |  |  |  |
|                                   | Identification number:            | -                          |                     |  |  |  |  |
|                                   | Authorization no.:                | -                          |                     |  |  |  |  |



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|      | Hazard pictograms:                                 | GHS07  |
|------|--|--|
|      | Signal word:                                       | Warning  |
|      | Hazard statements:                                 | H319 Causes serious eye irritation.  |
|      | Precautionary statements:                          | P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Immediately call a POISON CENTER or physician. |
|      | Supplemetal hazard information (EU):               | -  |
| 2.3. | Other hazards                                      |  |
|      | <b>Endocrine Disrupting Proper</b>                 | ties:  |
|      | No known endocrine disruptin                       | g properties   |
|      | <b>Results of PBT and vPvB asse</b> PBT or a vPvB. | <b>essment</b> : According to the results of its assessment, this substance is not a   |

| SECTION 3. Co                            | SECTION 3. Composition/information on ingredients |                                |                         |  |  |  |  |  |  |
|--|---|--------------------------------|-------------------------|--|--|--|--|--|--|
| CAS/<br>EC/<br>Index no.                 | REACH<br>Registration No                          | Weight % content<br>(or range) | Identification<br>name  | Classification according to Regulation (EC) No 1272/2008 (CLP) |  |  |  |  |  |
| 7681-57-4/<br>231-673-0/<br>016-063-00-2 | -   | < 10 %                         | sodium<br>metabisulfite | Acute Tox. 4, H302<br>Eye Dam. 1; H318<br>EUH031               |  |  |  |  |  |

| SECTION | SECTION 4. First aid measures     |  |  |  |  |  |
|---------|-----------------------------------|--|--|--|--|--|
| 4.1.    | Description of first aid measures |  |  |  |  |  |
|         | General notes:                    | Take off contaminated clothing.  |  |  |  |  |
|         | Following inhalation:             | Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.   |  |  |  |  |
|         | Following skin contact:           | Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.  |  |  |  |  |
|         | Following eye contact:            | In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. |  |  |  |  |



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|      | Following ingestion:                |          | Rinse mouth. Call a doctor if you feel unwell. |
|------|-------------------------------------|----------|--|
|      | Self-protection of the first aider: |          | Treat symptomatically.                         |
| 4.2. | Most important symptoms             | s and ef | fects, both acute and delayed                  |
|      | 3                                   |          | nformation available                           |
|      |                                     |          | information available                          |
|      | Following eye contact:              | Risk     | of blindness, Risk of serious damage to eyes.  |
|      | Following ingestion:                | No i     | nformation available                           |
| 4.3. | Indication of any immediate medic   |          | cal attention and special treatment needed     |
|      | -                                   |          |  |

| SECTIO | SECTION 5. Firefighting measures                                 |  |  |  |  |  |
|--------|--|--|--|--|--|--|
| 5.1.   | Extinguishing media  |  |  |  |  |  |
|        | Suitable extinguishing media:                                    | Small fire - water spray, dry powder, foam, CO <sub>2</sub> Large fire - water spray or alcohol-resistant foam |  |  |  |  |
|        | Unsuitable extinguishing media:                                  | water jet  |  |  |  |  |
| 5.2.   | Special hazards arising from the substance or mixture            |  |  |  |  |  |
|        | Hazardous combustion products:                                   | No information available   |  |  |  |  |
| 5.3.   | Advice for firefighters  |  |  |  |  |  |
|        | Do not enter fire area without pro                               | oper protective equipment, including respiratory protection.   |  |  |  |  |
| 5.4.   | Additional information   |  |  |  |  |  |
|        | Remove sources of heat and ignit Do not contaminate the environm |  |  |  |  |  |

| SECTIO | TION 6. Accidental release measures                                      |  |  |  |  |  |
|--------|--|--|--|--|--|--|
| 6.1.   | Personal precautions, protective equipment and emergency procedures      |  |  |  |  |  |
| 6.1.1. | For non-emergency personnel  |  |  |  |  |  |
|        | Protective equipment: Use personal protective equipment (see Section 8). |  |  |  |  |  |
|        | Accident prevention methods:   | Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke. |  |  |  |  |
|        | Emergency procedures:  | Mark the area using proper signs.  |  |  |  |  |
| 6.1.2. | For emergency responders:  |  |  |  |  |  |
|        | Do not enter fire area without pro                                       | oper protective equipment, including respiratory protection.   |  |  |  |  |
| 6.2.   | Environmental precautions:   |  |  |  |  |  |
|        | Do not dispose of in sewage, drain Protection and Rescue Directorat      | inage system and waterways. In case of large spillage contact National e (NPRD) on 112.  |  |  |  |  |



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| 6.3.   | Methods and material for co  | ntainment and cleaning up   |
|--------|--|---|
| 6.3.1. | Bunding, covering of drains; capping procedures:   | Covering of drains. Take up mechanically.   |
| 6.3.2. | Cleaning up:   | Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water. |
| 6.3.3. | Other information:   | Place in appropriate containers for disposal.   |
| 6.4.   | Reference to other sections  |   |
|        | See Section 7 for information<br>See Section 8 for information<br>See Section 13 for information | about personal protective equipment.  |

| SECTIO | ON 7. Handling and storage   |           |  |  |  |
|--------|--|-----------|--|--|--|
| 7.1.   | Precautions for safe handling  |           |  |  |  |
| 7.1.1. | Protection measures  |           |  |  |  |
|        | Measures to prevent fire:  |           | Keep away from sources of heat and ignition. Do not smoke.   |  |  |
|        | Measures to prevent aerosol and dust generat   | ion:      | Secure proper ventilation.   |  |  |
|        | Measures to protect the environment:   |           | Prevent spilling into the sewage system and waterways.   |  |  |
|        | Other measures:  |           | -  |  |  |
| 7.1.2. | Advice on general occupational hygiene:  |           |  |  |  |
|        | Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating. |           |  |  |  |
| 7.2.   | Conditions for safe storage, including any inco  | mpatibili | ities  |  |  |
|        | Technical measures and storage conditions:   | •         | n tightly closed and upright set containers in a well<br>ted place.  |  |  |
|        | Packaging materials:   | Manufa    | acturer's original packaging.  |  |  |
|        | Requirements for storage rooms and vessels:  | Keep av   | way from food and drink. Keep the containers<br>closed.  |  |  |
|        | Advices for storage equipment:   | be resis  | orage must be made of hard material; floors must stant to chemicals. There must be no drain that releads into sewage system. Secure proper tion.                     |  |  |
|        | Further information on storage conditions:   | and do    | ot place the unused material in the storage room<br>do not use empty containers for storing other<br>nicals. Do not store with incompatible materials (see<br>on 9). |  |  |



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| 7.3. | Specific end use(s)                   |   |
|------|---------------------------------------|---|
|      | Recommendations:                      | - |
|      | Industrial sector specific solutions: | - |

| 8.1. Control par                |          |                    | al protec                | tion              |                          |                                      |       |                            |  |
|---------------------------------|----------|--------------------|--------------------------|-------------------|--------------------------|--------------------------------------|-------|----------------------------|--|
| Substance                       | <b>'</b> |                    | No                       |                   |                          | al exposure limit<br>ort term values | E     | Biological limit values    |  |
|                                 | 3.5      |                    |                          | ppm               | mg/m³                    |                                      | 3     |                            |  |
| -                               |          | -                  |                          |                   | -                        | -                                    | No ir | nformation available       |  |
|                                 |          |                    |                          |                   |                          |                                      |       |                            |  |
| Substance - name:               |          |                    |                          |                   |                          |                                      |       |                            |  |
| EC No: -                        |          | CAS No:            | -                        |                   |                          |                                      |       |                            |  |
| DNEL                            |          |                    |                          |                   |                          |                                      |       |                            |  |
|                                 |          |                    |                          | Inc               | dustrial                 |                                      |       |                            |  |
| Route of exposure:              |          | Acute<br>ect local | effe                     | Acute             |                          | Chronic<br>effect local              |       | Chronic<br>effect systemic |  |
| Oral                            | -        | et local           | -                        | ct sys            | terric                   | -                                    |       | -                          |  |
| Inhalation                      | _        |                    | _                        |                   |                          | -                                    |       | -                          |  |
| Dermal                          | -        |                    | -                        |                   |                          | -                                    |       | -                          |  |
| Critical physical para          | meters:  | solubility, fla    | mmabili                  | ty, coı           | rosivity:                | -                                    |       |                            |  |
|                                 |          |                    |                          | Co                | nsumer                   |                                      |       |                            |  |
| Route of                        | A        | Acute              |                          | Acute             | 9                        | Chronic                              |       | Chronic                    |  |
| exposure:                       | effe     | ect local          | effe                     | ct syst           | temic                    | effect local                         |       | effect systemic            |  |
| Oral                            | -        |                    | -                        |                   |                          | -                                    |       | -                          |  |
| Inhalation                      | -        |                    | -                        |                   |                          | -                                    |       | -                          |  |
| Dermal                          | -        |                    | -                        |                   |                          | -                                    |       | -                          |  |
| PNEC                            |          |                    |                          |                   | 1                        |                                      |       |                            |  |
| Environmental protection target |          | PNEC               |                          |                   |                          |                                      |       |                            |  |
| Fresh water                     |          |                    |                          | rmation available |                          |                                      |       |                            |  |
| Freshwater sediments            |          |                    | No information available |                   |                          |                                      |       |                            |  |
| Marine water                    |          |                    | No information available |                   |                          |                                      |       |                            |  |
| Marine sediments                |          |                    |                          |                   |                          | rmation available                    |       |                            |  |
| Food chain                      |          |                    |                          |                   |                          | rmation available                    |       |                            |  |
| Microorganisms in se            | ewage tr | eatment            |                          |                   | No information available |                                      |       |                            |  |



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| Soil (agric | ultural)   |              | No information available   |  |  |
|-------------|--|--------------|--|--|--|
| Air         |  |              | No information available   |  |  |
|             |  |              |  |  |  |
| 8.2.        | Exposure controls  |              |  |  |  |
| 8.2.1.      | Engineering measures   |              |  |  |  |
|             | Substance/mixture relate measures to prevent expoduring identified uses: |              | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.  |  |  |
|             | Structural measures to prexposure:                                       | event        | No information available   |  |  |
|             | Organisational measures prevent exposure:                                | to           | Organization of work in order to reduce other worker's influence during work process.  |  |  |
|             | Technical measures to pr exposure:                                       | event        | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.   |  |  |
| 8.2.2.      | Personal protection equip  | uipment      |  |  |  |
| 8.2.2.1.    | Eye and face protection:   |              | Safety glasses that stick to face (preventing splashing) (EN 166) or visor.  |  |  |
| 8.2.2.2.    | Skin protection  |              |  |  |  |
|             | Hand protection:   | Chem<br>374. | mical protection gloves are suitable, which are tested according to EN  Glove material: nitrile rubber  Glove thickness: > 0.11 mm  Break through time: >480 min |  |  |
|             | Other skin protection:   |              | antistatic clothing made of natural fibers (such as cotton) with long es (EN 13034), and shoes that cover the entire foot (EN 10335).                            |  |  |
| 8.2.2.3.    | Respiratory protection:  | In cas       | e of inadequate ventilation wear respiratory protection.   |  |  |
| 8.2.2.4.    | Thermal hazards:   | No in        | formation available  |  |  |
| 8.2.3.      | Environmental exposure   | controls     |  |  |  |
|             | Substance/mixture relate measures to prevent expe                        |              | See Section 6  |  |  |
|             | Structural measures to prexposure:                                       | event        | Use modern equipment.  |  |  |
|             | Organisational measures prevent exposure:                                | to           | Adapt the work process to the required working conditions of the workplace. Keep away from drains, surface and ground water.                                     |  |  |
|             | Technical measures to prexposure:  | event        | See Section 6  |  |  |

#### **SECTION 9. Physical and chemical properties**

9.1. Information on basic physical and chemical properties



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|   | Value   | Method                   |
|---|---|--------------------------|
| Physical state:   | liquid  | No information available |
| Color:  | colourless  | No information available |
| Odour/odour threshold:                                    | No information avaialble/no information available | No information available |
| Melting point / freezing point:                           | No information available                          | No information available |
| Boiling point or initial boiling point and boiling range: | No information available                          | No information available |
| Flammability:   | No information available                          | No information available |
| Lover and upper explosion limit:                          | No information available                          | No information available |
| Flash point:  | No information available                          | No information available |
| Auto-ignition temperature:                                | No information available                          | No information available |
| Decomposition temperature:                                | No information available                          | No information available |
| pH:   | No information available                          | No information available |
| Kinematic viscosity:                                      | No information available                          | No information available |
| Solubility:   | No information available                          | No information available |
| Partition coefficient n-octanol/water (log value):        | No information available                          | No information available |
| Vapour pressure:  | No information available                          | No information available |
| Density and/or relative density                           | No information available                          | No information available |
| Relative vapour density:                                  | No information available                          | No information available |
| Particle characteristics:                                 | No information available                          | No information available |
| Other information   |   |                          |

| SECTIO | SECTION 10.: Stability and reactivity |  |  |  |
|--------|---------------------------------------|--|--|--|
| 10.1.  | Reactivity:                           | See subsections 10.3 through 10.5.   |  |  |
| 10.2.  | Chemical stability:                   | The product is chemically stable under standard ambient conditions of storing and using. |  |  |
| 10.3.  | Possibility of hazardous reactions:   | No information available.  |  |  |
| 10.4.  | Conditions to avoid:                  | No information available.  |  |  |
| 10.5.  | Incompatible materials:               | No information available.  |  |  |
| 10.6.  | Hazardous decomposition products:     | No information available.  |  |  |

#### **SECTION 11. Toxicological information**

Information on hazard classes as defined in Regulation (EC) No 1272/2008 11.1.



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| Acute tox               | icity:                     |                          |   |                  |                           |
|-------------------------|----------------------------|--------------------------|---|------------------|---------------------------|
| Route of<br>exposure:   | Method                     | Species                  | Effective<br>dose<br>LD <sub>50</sub> /LC <sub>50</sub><br>or<br>ATE <sub>mixture</sub> | Exposi<br>time   | RACILITE                  |
| Oral exposure:          | No information available   | -                        | LD <sub>50</sub>  | -                | -                         |
| Dermal exposure:        | No information available   | -                        | LD <sub>50</sub>  | -                | -                         |
| Inhalation<br>exposure: | No information available   | -                        | LC <sub>50</sub>  | -                | -                         |
| Specific ta             | arget organ toxicity – sin | gle exposure (STO        | ΓSE):   |                  |                           |
|                         | Specifi                    | c effects                | Targ  | et organ         | Note                      |
| Oral exposure:          | No information av          | ailable                  | No inform available   | nation           | -                         |
| Dermal exposure:        | No information av          | No information available |   | nation           | -                         |
| Inhalation exposure     | e: No information av       | No information available |   | nation           | -                         |
| Respirato               | ry irritation:             | No information           | available   |                  |                           |
|                         | ,                          |                          |   |                  |                           |
| Irritation a            | and corrosion              |                          |   |                  |                           |
|                         | Exposure time              | Species                  | Evaluati<br>on  | Meth<br>od       | Note                      |
| Skin irritation:        | -                          | -                        | -   | _                |                           |
| Eye irritation:         | -                          | -                        | -   | _                | Causes serious eye damage |
| Sensitizat              | ion                        |                          |   |                  |                           |
| Dermal exposure:        | No information availab     | ole                      |   |                  |                           |
| Inhalation exposure:    | No information availab     | ole                      |   |                  |                           |
|                         |                            | ah anaka 1 anta a        |   | <b>.</b> · · · · |                           |
|                         | s related to the physical, |                          | cological chara   | acteristics      |                           |
| Oral exposure:          | No information avai        |                          |   |                  |                           |
| Dermal exposure:        | No information avai        |                          |   |                  |                           |
| Inhalation exposure     | e: No information avai     | lable                    |   |                  |                           |



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| Repeat                          | ed dose toxicity (su     | bacute, subchr                 | onic, chronic)                 |                                |                          |        |      |
|---------------------------------|--------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------|--------|------|
|                                 | Dose                     | Exposure time                  | Species                        | Method                         | Evaluation               | 1      | Note |
| Subacute oral                   | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform available      | nation | -    |
| Subacute<br>dermal              | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform                | nation | -    |
| Subacute<br>inhalation          | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform                | nation | -    |
| Subchronic<br>oral              | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform available      | nation | -    |
| Subchronic<br>dermal            | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform available      | nation | -    |
| Subchronic inhalation           | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No information available |        | -    |
| Chronic oral                    | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No information available |        | -    |
| Chronic dermal                  | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform available      | nation | -    |
| Chronic<br>inhalation           | No information available | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | No inform available      | nation | -    |
| -                               |                          |                                |                                |                                |                          |        |      |
| Specific                        | target organ toxic       | <u> </u>                       | •                              |                                |                          |        |      |
|                                 |                          | Specific effect                | ts                             | Target or                      |                          |        | Note |
| Subacute oral                   |                          | ation available                |                                | No information                 |                          | -      |      |
| Subacute derma                  |                          | ation available                |                                | No information                 |                          | -      |      |
| Substranis and                  |                          | ation available                |                                | No information                 |                          | -      |      |
| Subchronic oral Subchronic derm |                          | ation available                |                                | No information                 |                          | -      |      |



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| Subchro | onic inhalation                       | No information ava                        | ilable                   | No information available | - |  |  |  |
|---------|---------------------------------------|---|--------------------------|--------------------------|---|--|--|--|
| Chronic | oral                                  | No information ava                        | ilable                   | No information available | - |  |  |  |
| Chronic | dermal                                | No information ava                        | ilable                   | No information available | - |  |  |  |
| Chronic | Chronic inhalation No information ava |   |                          | No information available | - |  |  |  |
|         | CMR effects (c                        | carcinogenicity, mutag                    | genicity, repr           | oductive toxicity)       |   |  |  |  |
|         | Carcinogenicit                        | ty:                                       | No informa               | ation available          |   |  |  |  |
|         | Mutagenicity                          | in-vitro:                                 | No information available |                          |   |  |  |  |
|         | Genotoxicity:                         |   | No informa               | ation available          |   |  |  |  |
|         | Mutagenicity                          | in-vivo:                                  | No informa               | ation available          |   |  |  |  |
|         | Germ cell mut                         | agenicity:                                | No information available |                          |   |  |  |  |
|         | Reproductive                          | toxicity:                                 | No information available |                          |   |  |  |  |
|         |                                       |   |                          | ,                        |   |  |  |  |
|         | Summary of e                          | valuation of the CMR                      | properties:              | -                        |   |  |  |  |
|         |                                       |   |                          |                          |   |  |  |  |
| 11.2.   | Information o                         | n other hazards:                          |                          |                          |   |  |  |  |
| 11.2.1. | Endocrine disr                        | rupting properties:                       |                          |                          |   |  |  |  |
|         | No known properties tha               | endocrine disrup<br>t affect human health | -                        |                          |   |  |  |  |
| 11.2.2. | Other informa                         | tions:                                    |                          |                          |   |  |  |  |

| CECTION 12 | ) Ecological  | information    |
|------------|---------------|----------------|
| SECTION 12 | z. Ecolouicai | IIIIOIIIIauoii |

#### 12.1. Toxicity

| Acute (short-term) toxicity | Dose             | Exposure<br>time | Species                  | Method                   | Evaluation               | Note |
|-----------------------------|------------------|------------------|--------------------------|--------------------------|--------------------------|------|
| Fish                        | LC <sub>50</sub> | 96 hours         | No information available | No information available | No information available | -    |
| Crustacea:                  | EC <sub>50</sub> | 48 hours         | No information available | No information available | No information available | -    |
| Algae/aquatic plants        | IC <sub>50</sub> | 8 days           | No information available | No information available | No information available | -    |
| Microorganisms              | LC <sub>50</sub> | 72 hours         | -                        | -                        | -                        | -    |
| Chronic toxicity            | Dose             | Exposure<br>time | Species                  | Method                   | Evaluation               | Note |
| Fish                        | LC <sub>50</sub> | 96 hours         | No information available | No information available | No information available | -    |



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|                            |                  |                    |            |  |                          |                          |                          |                     | Page 11                | 01 17    |
|----------------------------|------------------|--------------------|------------|--|--------------------------|--------------------------|--------------------------|---------------------|------------------------|----------|
| Trading nam                | e:               |                    |            | SOD  | IUM METAI                | BISUL                    | FITE, SOLU               | TION                |                        |          |
| Product code               | e:               | NM-OT-X            | <b>*</b> * | Re   | vision date:             | 21                       | Dec 2022                 |                     | Version:               | 4        |
| Crustacea:                 |                  | EC <sub>50</sub>   | 48 hours   |  | nformation<br>lable      | No information available |                          | No info             | rmation<br>e           | <b>-</b> |
| Algae/aquatic<br>plants    | 11.50 1/2.0011   |                    | 72 hours   |  | nformation<br>lable      | No ir<br>availa          | nformation<br>able       | No info<br>availabl | rmation<br>e           | -        |
| Other organis              | ms               | -                  | -          | micr   | oorganisms               | No ir<br>availa          | nformation<br>able       | No info<br>availabl |                        | -        |
| 12.2. Persi                | istence          | and degrad         | dability   |  |                          |                          |                          |                     |                        |          |
| Abio                       | tic deg          | radation           |            |  |                          |                          |                          |                     |                        |          |
|                            | De               | gradation h        | alf-lives  |  | Method                   |                          | Ev                       | aluation            |                        | Note     |
| Marine<br>water            | No ir            | nformation a       | available  | No inf   | ormation avai            | lable                    | No informat              | tion avail          | able                   | -        |
| Fresh water                | No ir            | nformation a       | available  | No inf   | ormation avai            | lable                    | No informat              | able                | -                      |          |
| ۹ir                        | No ir            | nformation a       | available  | No inf   | ormation avai            | able No information avai |                          |                     | able                   | -        |
| Soil                       | No ir            | nformation a       | available  | No inf   | ormation avai            | lable                    | No informat              | tion avail          | able                   | -        |
| Biod                       | egrada           | ntion              |            |  |                          |                          |                          |                     |                        |          |
| % Degradation              | n                | Time (da           | ays)       | M  | lethod                   |                          | Evaluation               |                     | No                     | te       |
| No informatio<br>available |                  | o info<br>vailable |            | No infoi<br>available                                      | rmation<br>e             | No ir<br>availa          | nformation<br>able       |                     | o informati<br>ailable | on       |
|                            |                  | lative poten       |            |  |                          |                          |                          | :                   |                        |          |
|                            |                  | efficient: n-      |            |  |                          |                          |                          |                     |                        |          |
| Value                      |                  | entration          | рН         | °C   | Method                   |                          | Evaluati                 |                     | N                      | ote      |
| _                          | No ir<br>availab | nformation<br>ble  | -          | -  | No informat<br>available | ion                      | No informat<br>available | tion                | -                      |          |
|                            |                  |                    |            |  |                          |                          |                          |                     |                        |          |
|                            | oncent           | ration facto       | r (BCF)    |  |                          |                          |                          |                     |                        |          |
| Bioc                       |                  |                    |            |  |                          |                          |                          |                     | NI.                    |          |
| Bioco<br>Value             |                  | Spe                | cies       | Method Evaluation ation No information available available |                          | Evaluation               |                          | No                  | te                     |          |



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|   | Chronic eco                             | toxicity                     |                        |                        |                                  |                        |                   |                        |        |      |
|---|---|------------------------------|------------------------|------------------------|----------------------------------|------------------------|-------------------|------------------------|--------|------|
|   | Value                                   | Dose                         | •                      | osure<br>me            | Species                          | Meth                   | od                | Evalua                 | ation  | Note |
| Chronic toxicity on fish LC <sub>50</sub> |   | h LC <sub>50</sub>           | No<br>inforr<br>availa | nation in              | No<br>nformat<br>on<br>available | No inform<br>available | nation            | No inform<br>available | nation | -    |
|   | toxicity on<br>ea ( <i>Daphnia</i> )    | EC50                         | No<br>inforr<br>availa | nation in              | No<br>nformat<br>on<br>available | No inform<br>available | nation            | No inform<br>available | nation | -    |
| 12.4.                                     | Mobility in s                           | oil                          |                        |                        |                                  |                        |                   |                        |        |      |
|   |   | edicted distribut            | ion in e               | environme              | ntal comp                        | partments:             |                   |                        |        |      |
|   |   | ion available                |                        |                        |                                  |                        |                   |                        |        |      |
|   | Surface tension:                        |                              |                        |                        |                                  |                        |                   |                        |        |      |
|   | Value                                   | °C                           |                        | Concen                 | tration                          | Meth                   | od                | Note                   |        |      |
|   | No information available available      |                              | nation                 | No inforr<br>available |                                  | No inform available    | nation            | -                      |        |      |
|   |   |                              |                        |                        |                                  |                        |                   |                        |        |      |
|   | Adsorption ,                            | / desorption                 |                        |                        |                                  |                        |                   |                        |        |      |
| Transpo                                   | rt í                                    | coefficient<br>ry's constant | lo                     | g Kow                  | Evapoi                           | ration rate            | M                 | ethod                  | ١      | Note |
| Soil-wat                                  | ter No<br>availabl                      | information<br>e             | No in availa           | formation<br>ble       | No info                          | ormation<br>le         | No inf<br>availat | ormation<br>ole        | -      |      |
| Water-a                                   | iir No<br>availabl                      | information<br>e             | No in<br>availa        | formation<br>ble       | No info                          | ormation<br>le         | No inf<br>availat | ormation<br>ole        | -      |      |
| Soil-air                                  | I-air No information No infor available |                              | formation<br>ble       | No info                | ormation<br>le                   | No inf<br>availat      | ormation<br>ole   | -                      |        |      |
| 12.5.                                     | Results of Pl                           | BT and vPvB asse             | ccmant                 |                        |                                  |                        |                   |                        |        |      |
| 12.5.                                     |   | ion available                | Joinell                |                        |                                  |                        |                   |                        |        |      |



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|           | No known endocrine disrupting   | properties that affect the environment.  |
|-----------|---------------------------------|--|
|           |                                 |  |
| 12.7.     | Other adverse effects           |  |
|           | No adverse effects are expected | l  |
|           |                                 |  |
|           | 13. Disposal considerations     |  |
| 13.1.     | Waste treatment methods         |  |
| 12.1.1    | Duraturat/Darkarainan diananah  |  |
| 13.1.1.   | Product/Packaging disposal:     | Lineare a subharinad butha Ministry of Favirence and Nature  |
|           | Protection.                     | al person authorized by the Ministry of Environmental and Nature   |
|           | 1                               |  |
| 13.1.2.   | Waste codes/waste designatio    | ns according to Law:   |
|           | No information available        |  |
|           |                                 |  |
| 13.1.3.   | Waste treatment – relevant inf  | ormation:  |
|           | No information available        |  |
|           |                                 |  |
| 13.1.4.   | Sewage disposal – relevant info |  |
|           | Waste must not be disposed o    | f into the sewage system.  |
|           |                                 |  |
| 13.1.5.   | Other disposal recommendation   |  |
|           | authorized by the ministry in c | 's remains into the sewage system. Submit the remains to the collectors harge. Do not dispose of the packaging into the sewage system. Submit is authorized by the ministry in charge. Do not dispose of in places where |
| 13.1.6.   | Relevant Community provision    | ns:  |
|           | -                               |  |
|           |                                 |  |
|           | 1 14. Transport information     |  |
| <u>i</u>  | Transporting/shipment by road   |  |
| UN numb   |                                 | Not subject to transport regulations.  |
|           | er shipping name:               | -  |
| •         | t hazard class(es):             | -  |
| Packing o |                                 | -  |
| Environm  | entally hazardous:              | -  |



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| Special precautions for user:       | -                                     |  |  |  |  |
|-------------------------------------|---------------------------------------|--|--|--|--|
| Transporting/shipment by rail (F    | RID)                                  |  |  |  |  |
| UN number:                          | Not subject to transport regulations. |  |  |  |  |
| UN proper shipping name:            | -                                     |  |  |  |  |
| Transport hazard class(es):         | -                                     |  |  |  |  |
| Packing group:                      | -                                     |  |  |  |  |
| Environmentally hazardous:          | -                                     |  |  |  |  |
| Special precautions for user:       | -                                     |  |  |  |  |
| Inland waterway transport (ADN      | 1)                                    |  |  |  |  |
| UN number:                          | Not subject to transport regulations. |  |  |  |  |
| UN proper shipping name:            | -                                     |  |  |  |  |
| Transport hazard class(es):         | -                                     |  |  |  |  |
| Packing group:                      | -                                     |  |  |  |  |
| Environmentally hazardous:          | -                                     |  |  |  |  |
| Special precautions for user:       | -                                     |  |  |  |  |
| Transporting/shipment by sea (IMDG) |                                       |  |  |  |  |
| UN number:                          | Not subject to transport regulations. |  |  |  |  |
| UN proper shipping name:            | -                                     |  |  |  |  |
| Transport hazard class(es):         | -                                     |  |  |  |  |
| Packing group:                      | -                                     |  |  |  |  |
| Environmentally hazardous:          | -                                     |  |  |  |  |
| Special precautions for user:       | -                                     |  |  |  |  |
| Transporting/shipment by air (IC    | CAO-TI/IATA-DGR)                      |  |  |  |  |
| UN number:                          | Not subject to transport regulations. |  |  |  |  |
| UN proper shipping name:            | -                                     |  |  |  |  |
| Transport hazard class(es):         | -                                     |  |  |  |  |
| Packing group:                      | -                                     |  |  |  |  |
| Environmentally hazardous:          | -                                     |  |  |  |  |
| Special precautions for user:       | -                                     |  |  |  |  |
|                                     |                                       |  |  |  |  |
| Further information: The product is | not subject to classification.        |  |  |  |  |

| SECTIO | SECTION 15. Regulatory information   |  |  |  |
|--------|--|--|--|--|
| 15.1.  | Safety, health and environmental regulations/legislation specific for the substance or mixture |  |  |  |
|        | EU regulations   |  |  |  |



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|       | Authorization and/or res           | strictions of use  |
|-------|------------------------------------|--|
|       | Authorizations:                    | -  |
|       | Restrictions:                      | -  |
|       | Other EU regulations:              | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation an Restriction of Chemicals (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/9 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC an 2000/21/EC;  Directive 2004/42/CE of the European Parliament and of the Council of 21 April 200 on the limitation of emissions of volatile organic compounds due to the use organic solvents in certain paints and varnishes and vehicle refinishing products an amending Directive 1999/13/EC;  Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safet of workers from the risks related to chemical agents at work;  Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 1 December 2008 on classification, labelling and packaging of substances an mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, an amending Regulation (EC) No 1907/2006;  REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); |
|       | Information according 1 guideline) | 999/13/EC about limitation of emissions of volatile organic compounds (VOC-  |
|       | National legislation:              | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act  |
| 15.2. | Chemical safety assessm            | ent  |
|       | None                               |  |

| SECTION 16. Other infor | ion  |  |
|-------------------------|------|--|
| 16.1. Indication of cha | s: - |  |



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| 16.2.    | Ab     | breviations and acronym   | 5:  | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals  EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative |  |  |  |  |
|----------|--------|---|---|--|--|--|--|--|
| 16.3.    |        | y literature references and urce of data:   |   |  |  |  |  |  |
| 16.4.    |        | Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP) |   |  |  |  |  |  |
| Classifi | cation | า   | Classif   | ication procedure  |  |  |  |  |
| -        |        |   | -   |  |  |  |  |  |
| 16.5.    | Rel    | evant H statements (num   | ber and   | full text)   |  |  |  |  |
|          |        | 302   | Harmf   | ul if swallowed.   |  |  |  |  |
|          | H:     | 318   | Causes  | s serious eye damage.  |  |  |  |  |
|          |        | 319   | Cause   | s serious eye irritation.  |  |  |  |  |
|          |        | EUH031  | Contac  | ct with acids liberates toxic gas.   |  |  |  |  |
| 16.6.    | Tra    | ining advice:   | -   |  |  |  |  |  |
| 16.7.    | Fur    | ther information:   | ** "X" in the product code marks different volumes (different packagings of the product)  We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet. |  |  |  |  |  |

| ANNEX: Exposure scenario | resulting to Chemical safety assessment |
|--------------------------|---|
| -                        |   |



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| Product code: | NTB-OT-X**                   | Revision date: | 14 November 2022 | Version: | 7 |

| SECTI | ION 1: Identification of                         | the substance  | e/mixture  | and of the company/undertaking   |  |  |  |
|-------|--|----------------|--|----------------------------------|--|--|--|
| 1.1   | Product identifier                               |                |  |                                  |  |  |  |
|       | Trading name:                                    | SODIUM TE      | SODIUM TETRABORATE, SOLUTION   |                                  |  |  |  |
|       | Chemical name:                                   | -              | -  |                                  |  |  |  |
|       | Catalogue number:                                | NTB-OT-X**     |  |                                  |  |  |  |
| 1.2   | Relevant identified us                           | es of the subs | tance or m   | nixture and uses advised against |  |  |  |
|       | Uses:  |                | For use  | with special staining kits.      |  |  |  |
|       | Uses advised against:                            |                | Only the   | e identified uses are advised.   |  |  |  |
|       | Reason why uses advised against:                 |                | The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes. |                                  |  |  |  |
| 1.3   | Details of the supplier of the safety data sheet |                |  |                                  |  |  |  |
|       | Supplier:  |                | BioGnost Ltd.  |                                  |  |  |  |
|       | Address:   |                | Medjugorska 59, Zagreb   |                                  |  |  |  |
|       | Telephone number:                                |                | +385 1 2409997   |                                  |  |  |  |
|       | Telefax.:  |                | +385 1 2404039   |                                  |  |  |  |
|       | e-mail of competent                              | person:        | msds@biognost.hr   |                                  |  |  |  |
|       | National contact:                                |                | -  |                                  |  |  |  |
| 1.4   | Emergency telephone number                       |                |  |                                  |  |  |  |
|       | National Protection a                            | nd Rescue Dire | ectorate:  | : 112                            |  |  |  |
|       | Medical information:                             |                |  | +385 1 2348 342                  |  |  |  |
|       | Other information:                               |                |  | -                                |  |  |  |

| SECTIO   | TION 2. Hazards identification   |  |                     |  |  |  |  |
|----------|----------------------------------|--|---------------------|--|--|--|--|
| 2.1      | Classification of the substance  | Classification of the substance or mixture |                     |  |  |  |  |
| 2.1.1    | Classification according to Reg  | ulation (EC) No 12                         | 272/2008 (CLP)      |  |  |  |  |
|          | Hazard class and categ           | ory code:                                  | Hazard statements*: |  |  |  |  |
|          | Flam. Liq. 2 H225                |  |                     |  |  |  |  |
|          | Eye Irr. 2                       |  | H319                |  |  |  |  |
|          | STOT SE 3                        |  | H336                |  |  |  |  |
| 2.1.2.   | Additional information           |  |                     |  |  |  |  |
|          | -                                |  |                     |  |  |  |  |
| *For ful | ll text of Hazard- and EU Hazard | -statements: see S                         | ECTION 16           |  |  |  |  |
| 2.2      | Label elements                   |  |                     |  |  |  |  |
|          | Product identification:          | SODIUM TETRA                               | BORATE, SOLUTION    |  |  |  |  |
|          | Identification number:           | -  |                     |  |  |  |  |



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|     | Authorization number:   | -   |  |  |
|-----|---|---|--|--|
|     | Hazard pictograms:  | GHS02 GHS07   |  |  |
|     | Signal word:  | Danger  |  |  |
|     | Hazard statements:  | <ul><li>H225 Highly flammable liquid and vapor.</li><li>H319 Causes serious eye irritation.</li><li>H336 May cause drowsiness or dizziness</li></ul>  |  |  |
|     | Precautionary statements:   | P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |  |  |
|     | Supplemetal hazard information (EU):  | -   |  |  |
| 2.3 | Other hazards   |   |  |  |
|     | Endocrine Disrupting Properties:  |   |  |  |
|     | No known endocrine disrupting properties.  This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |   |  |  |

| SECTION 3. Co                            | SECTION 3. Composition/information on ingredients |                                |                     |  |  |  |  |
|--|---|--------------------------------|---------------------|--|--|--|--|
| CAS/<br>EC/<br>Index number              | REACH Registration<br>No                          | Weight % content<br>(or range) | Identification name | Classification according to<br>Regulation (EC) No<br>1272/2008 (CLP) |  |  |  |
| 64-17-5/<br>200-578-6/<br>603-002-00-5   | 01-2119457610-43-<br>0147                         | 40 - 60 %                      | ethanol             | Flam. Liq. 2; H225   |  |  |  |
| 67-63-0/<br>200-661-7/<br>603-117-00-0   | -   | 20 - 30 %                      | propan-2-ol         | Flam. Liq. 2; H225<br>Eye Irr. 2; H319<br>STOT SE 3; H336            |  |  |  |
| 1330-43-4/<br>215-540-4/<br>005-011-00-4 | -   | < 0.5 %                        | sodium tetraborate  | Eye Irr. 2; H319<br>Repr. 1B; H360FD                                 |  |  |  |



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| Following inhalation:  Following skin contact:  Following eye contact:  Following ingestion:  Following inhalation:  Following ingestion:  Following inhalation:  Following eye contact:  Following ingestion:  Following ingestion:  Following inhalation:  Following inhalation:  Following ingestion:  Following ingestion:  Following inhalation:  Central nervous system depression, prolonged or repeated expectance and cause: nausea, headache, vomiting, narcosis, drowsiness.  Following eye contact:  Defatting, dry skin.  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration  | 4.1 | Description of first aid measures                           |   |  |  |
|--|-----|---|---|--|--|
| Following inhalation:  ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.  Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the sym of irritation remain.  Rinse out with plenty of water with the eyelid held wide open for least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.  Do not induce vomiting. Do not insert any object into the unconscious person's mouth. Immediately consult a physician as show the container or label. In case of swallowing large quantit transport the afflicted person to the hospital.  Self-protection of the first aider:  Self-protection of the first aider:  4.2 Most important symptoms and effects, both acute and delayed  Following inhalation:  Central nervous system depression, prolonged or repeated exprancance cause: nausea, headache, vomiting, narcosis, drowsiness.  Following skin contact:  Defatting, dry skin.  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration |     | General notes:  | If the suggested first aid measures do not prove sufficient, seek medical attention.  |  |  |
| Following skin contact:  water for at least 20 minutes. Seek medical assistance if the sym of irritation remain.  Rinse out with plenty of water with the eyelid held wide open for least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.  Do not induce vomiting. Do not insert any object into the unconscious person's mouth. Immediately consult a physician as show the container or label. In case of swallowing large quantitition transport the afflicted person to the hospital.  Self-protection of the first aider:  Self-protection of the first aider:  Following inhalation:  Central nervous system depression, prolonged or repeated expectance can cause: nausea, headache, vomiting, narcosis, drowsiness.  Following skin contact:  Defatting, dry skin.  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration   |     | Following inhalation:                                       | Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen. |  |  |
| Following eye contact:    least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.    Do not induce vomiting. Do not insert any object into the unconscious person's mouth. Immediately consult a physician a show the container or label. In case of swallowing large quantititions transport the afflicted person to the hospital.    Self-protection of the first aider:  |     | Following skin contact:                                     | Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.                          |  |  |
| Following ingestion:  unconscious person's mouth. Immediately consult a physician a show the container or label. In case of swallowing large quantition transport the afflicted person to the hospital.  Self-protection of the first aider:  Most important symptoms and effects, both acute and delayed  Following inhalation:  Central nervous system depression, prolonged or repeated expectance cause: nausea, headache, vomiting, narcosis, drowsiness.  Following skin contact:  Defatting, dry skin.  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration  |     | Following eye contact:                                      |   |  |  |
| 4.2 Most important symptoms and effects, both acute and delayed  Following inhalation:  Central nervous system depression, prolonged or repeated expectance can cause: nausea, headache, vomiting, narcosis, drowsiness.  Following skin contact:  Defatting, dry skin.  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration  |     | Following ingestion:  | unconscious person's mouth. Immediately consult a physician and show the container or label. In case of swallowing large quantities,  |  |  |
| Following inhalation:  Central nervous system depression, prolonged or repeated expersal can cause: nausea, headache, vomiting, narcosis, drowsiness.  Defatting, dry skin.  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration  |     | Self-protection of the first aider:                         | -   |  |  |
| Following innalation:  can cause: nausea, headache, vomiting, narcosis, drowsiness.  Defatting, dry skin.  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration  | 4.2 | Most important symptoms and effects, both acute and delayed |   |  |  |
| Following eye contact:  Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration   |     | Following inhalation:                                       | Central nervous system depression, prolonged or repeated exposure can cause: nausea, headache, vomiting, narcosis, drowsiness.  |  |  |
| Following eye contact:  irritation, tearing, redness and pain.  Overexposure may cause mild, reversible liver effects. Aspiration  |     | Following skin contact:                                     | Defatting, dry skin.  |  |  |
| FOUNTING INDESTION.  |     | Following eye contact:                                      |   |  |  |
| lead to: lung edema, pneumonia   |     | Following ingestion:  | Overexposure may cause mild, reversible liver effects. Aspiration may lead to: lung edema, pneumonia  |  |  |

| SECTIO | SECTION 5. Firefighting measures                      |  |  |  |
|--------|---|--|--|--|
| 5.1    | Extinguishing media                                   |  |  |  |
|        | Suitable extinguishing media:                         | Carbon dioxide (CO <sub>2</sub> ), foam, dry powder.   |  |  |
|        | Unsuitable extinguishing media:                       | No information available.  |  |  |
| 5.2    | Special hazards arising from the substance or mixture |  |  |  |
|        | Hazardous combustion products:                        | Carbon oxides Combustible. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures. |  |  |
| 5.3    | Advice for firefighters                               |  |  |  |



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|     | Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.   |
|-----|--|
| 5.4 | Additional information   |
|     | Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system. |

| 6.1    | Personal precautions, protective equipment and emergency procedures |   |  |  |
|--------|---|---|--|--|
| 6.1.1. | .1. For non-emergency personnel                                     |   |  |  |
|        | Protective equipment:   | Use personal protective equipment (see Section 8).  |  |  |
|        | Accident prevention methods   | Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.   |  |  |
|        | Emergency procedures:   | Mark the area using proper signs.   |  |  |
| 6.1.2. | For emergency responders:   |   |  |  |
|        | Use protective equipment; in (see Section 8).                       | case of inadequate ventilation use adequate airways protective equipment  |  |  |
| 6.2    | Environmental precautions:  |   |  |  |
|        | Do not dispose of in sewage,<br>Protection and Rescue Directo       | drainage system and waterways. In case of large spillage contact National orate (NPRD) on 112.  |  |  |
| 6.3    | Methods and material for con  | tainment and cleaning up  |  |  |
| 6.3.1. | Bunding, covering of drains; capping procedures:                    | Sand protective barrier or barriers made of similar materials.  |  |  |
| 6.3.2. | Cleaning up:  | Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water. |  |  |
| 6.3.3. | Other information:  | Secure proper ventilation. Do not use incompatible materials (see Section 10).  |  |  |
| 6.4    | Reference to other sections   |   |  |  |
|        | See Section 7 for information                                       | on safe handling.   |  |  |
|        | See Section 8 for information                                       | on personal protection equipment.   |  |  |
|        | See Section 13 for disposal information.                            |   |  |  |

| SECTION 7. Handling and storage |                               |  |  |
|---------------------------------|-------------------------------|--|--|
| 7.1                             | Precautions for safe handling |  |  |
| 7.1.1.                          | Protection measures           |  |  |



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|        | Measures to prevent fire:                        | Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.  |  |  |
|--------|--|---|--|--|
|        | Measures to prevent aerosol and dust generation  | on: Secure proper ventilation.  |  |  |
|        | Measures to protect the environment:             | Prevent spilling into the sewage system and waterways.  |  |  |
|        | Other measures:                                  | Protect against electrostatic charges.  |  |  |
| 7.1.2. | Advice on general occupational hygiene:          |   |  |  |
|        | Do not eat, drink or smoke in the workspace. Th  | noroughly wash hands after work and before eating.  |  |  |
| 7.2    | Conditions for safe storage, including any incon | npatibilities   |  |  |
|        | Technical measures and storage conditions:       | Keep in tightly closed and upright set containers in a well ventilated storage rooms at temperatures ranging from 15 to 25 °C. Protect from heat and direct sunlight.                 |  |  |
|        | Packaging materials:                             | Manufacturer's original packaging. Suitable material: HDPE containers.  |  |  |
|        | Requirements for storage rooms and vessels:      | Keep away from food and drink. Keep the containers tightly closed.  |  |  |
|        | Advices for storage equipment:                   | The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.           |  |  |
|        | Further information on storage conditions:       | Do not place the unused material in the storage room<br>and do not use empty containers for storing other<br>chemicals. Do not store with incompatible materials<br>(see Section 10). |  |  |
| 7.3    | Specific end use(s)                              |   |  |  |
|        | Recommendations: -                               |   |  |  |
|        | Industrial sector specific solutions: -          |   |  |  |

| SECTION 8. Exposure controls/personal protection |         |  |          |                         |  |  |
|--|---------|--|----------|-------------------------|--|--|
| 8.1 Control parameters                           |         |  |          |                         |  |  |
| Substance  | CAS No  | Occupational exposure limit values/short term values |          | Biological limit values |  |  |
|  |         | ppm  | mg/m³    |                         |  |  |
| Ethanol  | 64-17-5 | 1000/-   | 1900/-   | -                       |  |  |
| Propan-2-ol                                      | 67-63-0 | 400/500  | 999/1250 | -                       |  |  |
|  |         | ·  |          |                         |  |  |
| Substance name: -                                |         |  |          |                         |  |  |



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|-----------------------|---------------------|-------------|------------------|------------|------------------|------------|--|--------|
| Product code:         | NTB-O1              | Γ-X**       | Revisi           | on date:   | 14 Noven         | nber 2022  | Version:                               | 7      |
|                       | :                   |             | :                |            | 3                |            | :                                      |        |
| EC No:                | -                   | CAS No      |                  |            |                  |            |  |        |
| DNEL                  |                     |             |                  |            |                  |            |  |        |
|                       |                     |             | In               | dustrial   |                  |            |  |        |
| Route of              | Acı                 | ute         | Acute            |            | Chronic          |            | Chronic                                |        |
| exposure:             | effect              | local       | effect system    | ic         | effect local     | $\epsilon$ | effect systemic                        |        |
| Oral                  | -                   |             | -                | -          |                  | -          |  |        |
| Inhalation            | 1900 mg<br>(ethanol | •           | -                | -          |                  | _          | /m³ (ethanol)<br>/m³ (propan-2-        | ol)    |
| Dermal                | -                   |             | -                | -          |                  | _          | /kg (ethanol)<br>/kg bw/day<br>n-2-ol) |        |
| Critical physical par | ameters:            | solubility, | flammability, co | rrosivity: | -                |            |  |        |
|                       |                     |             | Co               | onsumer    |                  |            |  |        |
| Route of              | A                   | cute        | Acute            |            | Chronic          |            | Chronic                                |        |
| exposure:             | effec               | ct local    | effect system    | ic         | effect local     | 6          | effect systemic                        |        |
| Oral                  | -                   |             | -                | -          |                  | _          | kg bw/day (eth<br>kg bw/day<br>n-2-ol) | anol)  |
| Inhalation            | 950 m<br>(ethar     | •           | -                | -          |                  | 114 mg     | /m³ (ethanol)<br>m³ (propan-2-o        | <br>l) |
| Dermal                | -                   |             | -                | -          |                  |            | /kg (ethanol)<br>/kg (propan-2-        | ol)    |
| PNEC                  |                     |             |                  |            |                  |            |  |        |
| Environmental prot    | ection tar          | get         |                  | PNEC       |                  |            |  |        |
| Fresh water           |                     |             |                  | 0.96 mg/   | l (ethanol)      |            |  |        |
| Freshwater sedimer    | nts                 |             |                  | 3.6 mg/k   | g (ethanol)      |            |  |        |
| Marine water          |                     |             |                  | 0.79 mg/   | l (ethanol)      |            |  |        |
| Marine sediments      |                     |             |                  | no inforn  | nation available |            |  |        |
| Food chain            |                     |             |                  | no inforn  | nation available |            |  |        |
| Microorganisms in     | sewage tr           | eatment     |                  | no inforn  | nation available |            |  |        |
| Soil (agricultural)   |                     |             |                  | 0.63 mg/   | kg (ethanol)     |            |  |        |
| Air                   |                     |             |                  |            | nation available |            |  |        |
|                       |                     |             |                  | 1          |                  |            |  |        |
| 8.2 Exposu            | ure contro          | ls          |                  |            |                  |            |  |        |
| 8.2.1. Appro          | priate eng          | ineering    | controls         |            |                  |            |  |        |



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|          | Structural measures to prevent exposure:                             | Use mo             | odern equipment.   |  |  |
|----------|--|--------------------|--|--|--|
|          | Substance/mixture related measures to prevent exposure:              | See Se             | ction 6  |  |  |
| 8.2.3.   | Environmental exposure controls                                      |                    |  |  |  |
| 8.2.2.4. | Thermal hazards:   |                    | ormation available   |  |  |
| 8.2.2.3. | Respiratory protection:  | inadeq<br>(boiling | concentration level exceeds the GVI values (or because of quate ventilation), use a filter for organic vapors, type "A" g point >65°C) according to EN 14387.  |  |  |
|          | Other skin protection:  Suitable cover to of import chemic           |                    | During everyday work use antistatic clothing (EN 13688) and suitable footwear, such as rubber boots (EN 20345) or shoes that cover the entire foot. In case of spilling hazard, use clothing mac of impermeable material suitable for protection from liquid chemicals (Viton, PVC, himex) and footwear made from the same material. |  |  |
| 8.2.2.2. | Hand protection:   | Full co            | Regulation (EU) 2016/425 and the related standard EN 374.  Full contact:  Glove material: butyl rubber  Glove thickness: ≥ 0.50 mm  Time until perforation: > 480 min  Splash contact:  Glove material: nitrile rubber  Glove thickness: 0.4 mm  Break through time: 35 min  |  |  |
|          | Skin protection  |                    | otective gloves have to satisfy the specification of   |  |  |
|          |  |                    | of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.  |  |  |
| 8.2.2.1. | Personal protection equipment  |                    | glasses that stick to face (EN 166) or visor in case of lower  |  |  |
| 8.2.2.   | ·  | .posuic.           | stations for rinsing eyes and showering.   |  |  |
|          | Technical measures to prevent ex                                     | vnosura:           | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure  |  |  |
|          | Organizational measures to preve<br>exposure:                        | ent                | Organization of work in order to reduce other worker's influence during work process.  |  |  |
|          | Structural measures to prevent exposure:                             |                    | In accordance with Section 7.  |  |  |
|          | Substance/mixture related measure prevent exposure during identified |                    | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.  |  |  |



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| Organisational measures to prevent exposure: | Adapt the work process to the required working conditions of the workplace. |
|--|---|
| Technical measures to prevent exposure:      | See Section 6   |

| Information on basic physical and chemical properties |   |                                       |                          |  |  |  |
|---|---|---------------------------------------|--------------------------|--|--|--|
|   |   | Value                                 | Method                   |  |  |  |
|   | Physical state:   | liquid                                | No information available |  |  |  |
|   | Colour:   | colourless                            | No information available |  |  |  |
|   | Odour/odour threshold:                                    | ethanol like/no information available | No information available |  |  |  |
|   | Melting point / freezing point:                           | No information available              | No information available |  |  |  |
|   | Boiling point or initial boiling point and boiling range: | No information available              | No information available |  |  |  |
|   | Flammability:   | No information available              | No information available |  |  |  |
|   | Lover and upper explosion limit:                          | No information available              | No information available |  |  |  |
|   | Flash point:  | 25 ℃                                  | No information available |  |  |  |
|   | Auto-ignition temperature:                                | No information available              | No information available |  |  |  |
|   | Decomposition temperature:                                | No information available              | No information available |  |  |  |
|   | рН:   | No information available              | No information available |  |  |  |
|   | Kinematic viscosity:                                      | No information available              | No information available |  |  |  |
|   | Solubility:   | No information available              | No information available |  |  |  |
|   | Partition coefficient n-<br>octanol/water (log value):    | No information available              | No information available |  |  |  |
|   | Vapour pressure:  | No information available              | No information available |  |  |  |
|   | Density and/or relative density                           | No information available              | No information available |  |  |  |
|   | Relative vapour density:                                  | No information available              | No information available |  |  |  |
|   | Particle characteristics:                                 | No information available              | No information available |  |  |  |

| SECTIO | SECTION 10. Stability and reactivity |   |  |  |  |  |
|--------|--------------------------------------|---|--|--|--|--|
| 10.1   | Reactivity:                          | See subsections 10.3 through 10.5.  |  |  |  |  |
| 10.2   | Chemical stability:                  | The product is chemically stable under standard ambient conditions of storing and using (room temperature). |  |  |  |  |
| 10.3   | Possibility of hazardous reactions:  | No dangerous reactions known.   |  |  |  |  |



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| 10.4 | Conditions to avoid:              | Avoid heat, sparks, open flames and other ignition sources. |
|------|-----------------------------------|---|
| 10.5 | Incompatible materials:           | Acids, bases, oxidants.                                     |
| 10.6 | Hazardous decomposition products: | Carbon monoxide and carbon dioxide.                         |

| SECTION 11. To                  | oxicological infor  | mation         |                          |  |            |                      |  |
|---------------------------------|---------------------|----------------|--------------------------|--|------------|----------------------|--|
| 11.1 Informa                    | ation on toxicologi | cal effects    |                          |  |            |                      |  |
| Acute t                         | oxicity:            |                |                          |  |            |                      |  |
| Route of exposure:              | Method              | Species        | Dos                      | se LD <sub>50</sub> /LC <sub>50</sub> or<br>ATE <sub>mix</sub> | Exposure 1 | time                 | Results  |
| Oral:                           | -                   | rat            |                          | LD <sub>50</sub>   | -          |                      | 7.060 mg/kg<br>(ethanol)<br>5.840 mg/kg<br>(2-propanol)          |
| Dermal:                         | -                   | rabbit         |                          | LD <sub>50</sub>   | -          |                      | >20.000<br>mg/kg<br>(ethanol)<br>12.800<br>mg/kg<br>(2-propanol) |
| Inhalation:                     | -                   | rat            |                          | LC <sub>50</sub>   | 4 h        |                      | >8.000 mg/l<br>(ethanol)<br>37.5 mg/l (2-<br>propanol)           |
| c :c:                           |                     |                |                          | TOT (F)  |            |                      |  |
| Specific                        | target organ toxic  |                | (posure (S               |  |            |                      |  |
|                                 | -                   | ecific effects |                          | Target   |            |                      | Note   |
| Oral:                           | No information      |                |                          | No information available                                       |            | -                    |  |
| Dermal:                         | No information      | on available   | No information available |  | -          |                      |  |
| Inhalation:                     | No information      | on available   | No information available |  |            | may cau<br>or dizzir | ise drowsiness<br>ness   |
| Aspirat                         | ion hazard:         |                | No infor                 | mation available.  |            |                      |  |
|                                 |                     |                |                          |  |            |                      |  |
| Irritatio                       | n and corrosion     |                |                          |  |            |                      |  |
|                                 | Expos               | ure time       | Spec                     | ies Evaluat  | ion Method |                      | Note   |
| Skin corrosion/irritat          | ion:                |                | _                        | -  | -          | -                    |  |
| Serious eye<br>damage/irritatio | on -                |                | rabbit                   | -  | -          | cause<br>irritat     | s serious eye<br>ion   |



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| Sensitiza                                      | ation                                |                                |                                    |                                |                                |                                |      |
|--|--------------------------------------|--------------------------------|------------------------------------|--------------------------------|--------------------------------|--------------------------------|------|
| Skin sensitizatior                             | 1:                                   | No inf                         | ormation avail                     | able.                          |                                |                                |      |
| Respiratory sensi                              | tization:                            | No inf                         | ormation avail                     | able.                          |                                |                                |      |
| Sympto   | ms related                           | d to the ph                    | nysical, chemic                    | al and toxicolog               | jical characterist             | ics                            |      |
| Oral exposure:                                 | No                                   | informati                      | on available.                      |                                |                                |                                |      |
| Dermal exposure                                | : No                                 | informati                      | on available.                      |                                |                                |                                |      |
| Inhalation exposi                              | ure: No                              | informati                      | on available.                      |                                |                                |                                |      |
| Eye exposure:                                  | No                                   | informati                      | on available.                      |                                |                                |                                |      |
| _  |                                      |                                |                                    |                                |                                |                                |      |
| Repeate  |                                      | ose (sub                       | acute, subchro<br>Exposure<br>time | Species                        | Method                         | Evaluation                     | Note |
| Subacute oral                                  | bacute oral No information available |                                | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -    |
| Subacute<br>dermal                             |                                      |                                | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -    |
| Subacute<br>inhalation                         | No info                              | ormation<br>e                  | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -    |
| Subchronic oral                                | No info                              | ormation<br>e                  | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -    |
| Subchronic<br>dermal                           |                                      |                                | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -    |
| Subchronic No information inhalation available |                                      | No<br>information<br>available | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | -                              |      |
| Chronic oral                                   | No info                              | ormation<br>e                  | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | _    |
| Chronic dermal                                 | No info                              | ormation<br>e                  | No<br>information<br>available     | No<br>information<br>available | No<br>information<br>available | No<br>information<br>available | -    |



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|---------------|------------|------------------------------|------------------|----------|---|--|--|--|--|
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| Chronic inhalation | No<br>availa   | information<br>able | No<br>information<br>available | No<br>information<br>available  | No<br>information<br>available | No<br>information<br>available | on    | _                |  |
|--------------------|--|---------------------|--------------------------------|---|--------------------------------|--------------------------------|-------|------------------|--|
| Speci              | fic target   | organ toxicit       | y – repeated e                 | exposure (STOT  | RE):                           |                                |       |                  |  |
| 1 -                |  | <del>-</del>        | Specific effe                  | cts   | Target o                       | rgan                           |       | Note             |  |
| Subacute oral      |  | No informa          | ition available                |   | No information                 | n available                    | _     |                  |  |
| Subacute derr      | nal  | No informa          | ition available                |   | No informatio                  | n available                    | -     |                  |  |
| Subacute inha      | lation   | No informa          | ition available                |   | No information                 | n available                    | -     |                  |  |
| Subchronic or      | al   | No informa          | ition available                |   | No informatio                  | n available                    | -     |                  |  |
| Subchronic de      | rmal   | No informa          | ition available                |   | No information                 | n available                    | -     |                  |  |
| Subchronic inl     | nalation   | No informa          | ition available                |   | No informatio                  | n available                    | -     |                  |  |
| Chronic oral       |  | No informa          | ition available                |   | No informatio                  | n available                    | -     |                  |  |
| Chronic derma      | al   | No informa          | ition available                |   | No informatio                  | n available                    | -     |                  |  |
| Chronic inhala     | tion   | No informa          | ition available                |   | No informatio                  | n available                    | -     |                  |  |
| Carci<br>Muta      | effects (c<br>nogenicity<br>genicity <i>i</i><br>toxicity: | y:                  | y; mutagenicit                 | Based on available data, the classification criteria are not met.  Based on available data, the classification criteria are not met.  Based on available data, the classification criteria are not met. |                                |                                |       |                  |  |
|                    | genicity i   | n vivo:             |                                | Based on available data, the classification criteria are not met.   |                                |                                |       |                  |  |
|                    |  | agenicity:          |                                | Based on available data, the classification criteria are not met.   |                                |                                |       |                  |  |
|                    | oductive t   |                     |                                | Based on available data, the classification criteria are not met.   |                                |                                |       |                  |  |
| Sumr               | mary of<br>erties:   | evaluation          | of the CN                      | MR Based on met.  | available data, t              | the classifica                 | ation | criteria are not |  |
| 11.2 Inform        | mation or  | other hazard        | ds:                            |   |                                |                                |       |                  |  |
| 11.2.1. Endo       | crine disr   | upting prope        | rties:                         |   |                                |                                |       |                  |  |
| No kı              | nown end   | ocrine disrup       | ting propertie                 | es that affect hu   | man health.                    |                                |       |                  |  |
| 11.2.2. Othe       | r informat   | tions:              |                                |   |                                |                                |       |                  |  |
| <b>-</b>           |  |                     |                                |   |                                |                                |       |                  |  |

| SECTION | <b>12. Eco</b> | logical ir | nformation |
|---------|----------------|------------|------------|
|---------|----------------|------------|------------|

12.1 Toxicity



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| Acute (short-term) toxicity     | Dose             | Exposure<br>time | Species                  | Method                         | Evaluation   | Note |
|---------------------------------|------------------|------------------|--------------------------|--------------------------------|--|------|
| Fish                            | LC <sub>50</sub> | 96 hours         | Pimephales<br>promelas   | No<br>information<br>available | 8.140 mg/l<br>(ethanol)<br>9.640 mg/l (2-<br>propanol) | -    |
| Crustacea:                      | EC <sub>50</sub> | 48 hours         | Daphnia<br>magna         | No<br>information<br>available | 7.800 mg/l<br>(ethanol)<br>13.299 mg/l<br>(2-propanol) | -    |
| Algae/aquatic plants            | IC <sub>50</sub> | 4 days           | algae                    | No<br>information<br>available | 5.000 mg/l<br>(ethanol)<br>>1,000 mg/l<br>(2-propanol) | -    |
| Other organisms                 | -                | -                | -                        | _                              | -  | -    |
| Chronic (long-term)<br>toxicity | Dose             | Exposure<br>time | Species                  | Method                         | Evaluation   | Note |
| Fish                            | LC <sub>50</sub> | 96 hours         | No information available | No<br>information<br>available | No information available                               | -    |
| Crustacea:                      | EC <sub>50</sub> | 48 hours         | No information available | No<br>information<br>available | No information available                               | -    |
| Algae/aquatic plants            | IC <sub>50</sub> | 72 hours         | No information available | No<br>information<br>available | No information available                               | -    |
| Other organisms                 | -                | _                | _                        | _                              | _  | _    |

| 12.2 | Persistence and degradability |
|------|-------------------------------|
|------|-------------------------------|

Abiotic degradation

Degradation half-lives Method Evaluation Note

Marine water No information available No information available available available -

| Marine water | No information available available |                          | available                | - |
|--------------|------------------------------------|--------------------------|--------------------------|---|
| Fresh water  | No information available           | No information available | No information available | - |
| Air          | No information available           | No information available | No information available | - |
| Soil         | No information available           | No information available | No information available | - |
|              | •                                  | •                        | •                        |   |



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|                                       | 1       |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|---------------------------------------|---------|------------------|-----------|------------------|--------|-----------------|----------|--------------------------|----------|---------------------|-----------|----------|------|
|                                       | Bioc    | degrad           | ation     |                  |        |                 |          |                          |          |                     |           |          |      |
| % De                                  | egrada  | ation            |           | Time (           | days)  |                 | N        | 1ethod                   |          | Evaluation          | ı         |          | Note |
| -                                     |         |                  | -         |                  |        |                 | -        | No information available |          | ١                   | -         |          |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
| 12.3                                  | Bioa    | accumu           | ılative p | ootentia         | al     |                 |          |                          |          |                     |           |          |      |
|                                       | Octa    | anol-w           | ater pa   | rtition o        | oeffic | cient (         | log Kow  | )                        |          |                     |           |          |      |
| Valu                                  | ie      | Cor              | ncentra   | tion             | рŀ     | 1               | °C       | Method                   |          | Ev                  | valuation | 1        | Note |
| -                                     |         | _                |           |                  | -      |                 | _        | -                        |          | -                   |           |          | -    |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       |         |                  |           | i                |        | i_              | i        |                          | <u> </u> |                     |           |          | i    |
|                                       | Bioc    | concen           | tration   | factor (         | BCF)   |                 |          |                          |          |                     |           |          |      |
| · · · · · · · · · · · · · · · · · · · |         | Speci            |           |                  | N      | Method          |          | Evaluation               | on       |                     | Note      |          |      |
| No info                               | rmati   | on               | No        |                  | forma  | ation No info   |          | rmation                  | No       | information         | on        |          |      |
| availabl                              | le      |                  | availa    | ble              |        | availab         |          | le                       | ava      | available           |           | -        |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       | Chr     | onic ec          | otoxici   | ty               |        |                 |          |                          |          |                     |           |          |      |
|                                       | 1/2     | lue              |           | Dos              |        | Ехр             | osure    | Species                  |          | Method              | Eval      | uation   | Note |
|                                       | Va      | iue              |           | DOS              | se     | t               | ime      | species                  | ľ        | vietnou             | EVall     | uation   | note |
|                                       |         |                  |           |                  |        | No              |          | No                       | No       |                     | No info   | ormation |      |
| Chronic                               | c toxic | ity on           | fish      | LC <sub>50</sub> |        | infor<br>availa | mation   | information available    |          | ormation<br>ailable | availab   |          | -    |
|                                       |         |                  |           |                  |        | No              | anie     | No                       | No       |                     |           |          |      |
| Chronic toxicity on EC                |         | EC <sub>50</sub> |           |                  | mation | information     |          | ,<br>ormation            |          | ormation            | -         |          |      |
| crustacea ( <i>Daphnia</i> )          |         |                  |           | availa           | able   | available       | ava      | ailable                  | availab  | le                  |           |          |      |
|                                       |         |                  |           |                  |        |                 |          |                          |          |                     |           |          |      |
| 12.4                                  | Mol     | oility in        | soil      |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       | Kno     | wn or            | predict   | ed distr         | ibutic | n in e          | environm | ental compar             | tmen     | ts:                 |           |          |      |
|                                       | No      | inform           | ation a   | vailable         |        |                 |          |                          |          |                     |           |          |      |
|                                       | Surf    | ace te           | nsion:    |                  |        |                 |          |                          |          |                     |           |          |      |
|                                       | ,       | Value            |           | °C               |        | C               | oncentra | ition                    |          | Metho               | od        |          | Note |



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|----------|-------|--------------------|---------------------------------------|--------------------------------|---------------------------------|---|-----------------------------|--------------------------|--|-------|---------------|----|
| Produc   |       |                    | NΊ                                    | ГВ-ОТ-Х**                      |                                 | vision da                                   |                             |                          | November 2022                                  | Vei   | rsion:        | 7  |
|          |       |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |
|          |       | rmatio<br>lable    | n                                     | No<br>information<br>available | No inform available             | nformation<br>able No information available |                             | on available             |  | -     |               |    |
|          |       |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |
|          | Ads   | orptior            | n / d                                 | lesorption                     |                                 |   |                             |                          |  |       |               |    |
| Transpo  | ort   |                    | -                                     | coefficient<br>'s constant     | log Kow                         | Evap  | ooration r                  | ate                      | Method   |       | Note          |    |
| Soil-wa  | ter   | No<br>availa       | ble                                   | information                    | No<br>informatio<br>n available | No info                                     | ormation<br>ble             |                          | No information available                       | _     |               |    |
| Water-a  | air   | No<br>availa       | o information<br>vailable             |                                | No<br>informatio<br>n available | No information available                    |                             | No information available | -  |       |               |    |
| Soil-air |       | No<br>availa       | ble                                   | information                    | No<br>informatio<br>n available |   | No information<br>available |                          | No information available                       | -     |               |    |
|          |       |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |
| 12.5.    | Resu  | ults of            | PBT                                   | and vPvB asses                 | sment                           |   |                             |                          |  |       |               |    |
|          |       |                    |                                       |                                |                                 |   |                             |                          | either persistent, bi<br>evels of 0.1% or high |       | umulative and | ŀ  |
|          | :     |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |
| 12.6.    | End   | ocrine             | disr                                  | upting properti                | es                              |   |                             |                          |  |       |               |    |
|          | accc  | ording             | to R                                  |                                | 7(f) or Comm                    | ission De                                   | elegated i                  |                          | to have endocrine d<br>tion (EU) 2017/2100     | •     | •             | :S |
|          |       |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |
| 12.7.    | Oth   | er adve            | erse                                  | effects                        |                                 |   |                             |                          |  |       |               |    |
|          | No 1  | further            | rele                                  | evant information              | on available.                   |   |                             |                          |  |       |               |    |
|          |       |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |
|          |       |                    |                                       | considerations                 | S                               |   |                             |                          |  |       |               |    |
| 13.1     | W     | aste tr            | eatr                                  | ment methods                   |                                 |   |                             |                          |  |       |               |    |
|          |       |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |
| 13.1.1.  |       |                    |                                       | kaging disposal                |                                 | ., .  | 11 .1                       |                          |  |       |               |    |
|          |       | ıbmit f<br>otectic |                                       | isposal to the le              | egal person a                   | uthorize                                    | d by the                    | Minist                   | ry of Environmental                            | and l | Nature        |    |
|          |       |                    |                                       |                                |                                 |   |                             |                          |  |       |               |    |



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| 13.1.2.  | Waste codes/waste design     | ations according to Law:  |  |  |  |  |  |  |
|----------|------------------------------|---|--|--|--|--|--|--|
|          | Packaging that contains re   | sidual hazardous substances or is contaminated with hazardous substances  |  |  |  |  |  |  |
|          |                              |   |  |  |  |  |  |  |
| 13.1.3.  | Waste treatment – relevan    | t information:  |  |  |  |  |  |  |
|          | No information available     | No information available  |  |  |  |  |  |  |
|          |                              |   |  |  |  |  |  |  |
| 13.1.4.  | Sewage disposal – relevant   | t information:  |  |  |  |  |  |  |
|          | Waste must not be dispose    | ed of into the sewage system.   |  |  |  |  |  |  |
|          |                              |   |  |  |  |  |  |  |
| 13.1.5.  | Other disposal recommend     | dations:  |  |  |  |  |  |  |
|          | authorized by the ministry   | duct's remains into the sewage system. Submit the remains to the collectors in charge. Do not dispose of the packaging into the sewage system. Submit ctors authorized by the ministry in charge. |  |  |  |  |  |  |
| 13.1.6.  | Relevant Community provi     | sions:  |  |  |  |  |  |  |
|          | Disposal must be made ac     | cording to official regulations.  |  |  |  |  |  |  |
|          |                              |   |  |  |  |  |  |  |
| SECTIO   | N 14 TRANSPORT INFORMA       | ATION   |  |  |  |  |  |  |
|          | Transporting/shipment by ro  | ad (ADR)  |  |  |  |  |  |  |
| UN num   | iber:                        | 1993  |  |  |  |  |  |  |
| UN prop  | per shipping name:           | Flammable liquid, n.o.s. (ethanol, isopropanol)   |  |  |  |  |  |  |
| Transpo  | rt hazard class(es):         | 3   |  |  |  |  |  |  |
| Packing  | group:                       | II  |  |  |  |  |  |  |
| Environr | mentally hazardous:          | -   |  |  |  |  |  |  |
| Special  | orecautions for user:        | -   |  |  |  |  |  |  |
|          | Transporting/shipment by ra  | il (RID)  |  |  |  |  |  |  |
| UN num   | ber:                         | 1993  |  |  |  |  |  |  |
| UN prop  | er shipping name:            | Flammable liquid, n.o.s. (ethanol, isopropanol)   |  |  |  |  |  |  |
| Transpo  | rt hazard class(es):         | 3   |  |  |  |  |  |  |
| Packing  | group:                       | II  |  |  |  |  |  |  |
| Environr | mentally hazardous:          | -   |  |  |  |  |  |  |
| Special  | orecautions for user:        | -   |  |  |  |  |  |  |
|          | Inland waterway transport (A | NDN)  |  |  |  |  |  |  |
| UN num   | ber:                         | 1993  |  |  |  |  |  |  |
| UN prop  | per shipping name:           | Flammable liquid, n.o.s. (ethanol, isopropanol)   |  |  |  |  |  |  |
| Transpo  | rt hazard class(es):         | 3   |  |  |  |  |  |  |
| Packing  |                              |   |  |  |  |  |  |  |



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| Environmentally hazardous:  | -   |
|---|---|
| Special precautions for user:   | -   |
| Transporting/shipment by sea (IN  | MDG)  |
| UN number:  | 1993  |
| UN proper shipping name:  | Flammable liquid, n.o.s. (ethanol, isopropanol) |
| Transport hazard class(es):   | 3   |
| Packing group:  | II  |
| Environmentally hazardous:  | -   |
| Special precautions for user:   | -   |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: | -   |
| Transporting/shipment by air (ICAO-TI/IATA-DGR)                           |   |
| UN number:  | 1993  |
| UN proper shipping name:  | Flammable liquid, n.o.s. (ethanol, isopropanol) |
| Transport hazard class(es):   | 3   |
| Packing group:  | II  |
| Environmentally hazardous:  | -   |
| Special precautions for user:   | -   |
|   |   |
| Further information: -  |   |

| SECTIO | SECTION 15. Regulatory information   |  |
|--------|--|--|
| 15.1   | Safety, health and environmental regulations/legislation specific for the substance or mixture |  |
|        | EU regulations   |  |
|        | Authorization and/or restrictions of use   |  |
|        | Authorizations: -  |  |
|        | Restrictions: -  |  |



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|      | Other EU regulations:                 | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain |
|------|---------------------------------------|--|
|      | Information according 1999 guideline) | dangerous substances, mixtures and articles (Annex XVII);  9/13/EC about limitation of emissions of volatile organic compounds (VOC-   |
|      | National legislation:                 | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act  |
| 15.2 | Chemical safety assessmen             | t  |
|      | None                                  |  |

| SECTION | SECTION 16. Other information                 |   |
|---------|---|---|
| 16.1    | Indication of changes:                        | -   |
| 16.2    | Abbreviations and acronyms:                   | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative |
| 16.3.   | Key literature references and source of data: | Manufacturer's MSDS file.   |



### According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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| Trading name: | SODIUM TETRABORATE, SOLUTION |                |                  |          |   |
|---------------|------------------------------|----------------|------------------|----------|---|
| Product code: | NTB-OT-X**                   | Revision date: | 14 November 2022 | Version: | 7 |

| 16.4.                      | Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP) |                  |   |  |  |
|----------------------------|---|------------------|---|--|--|
| Classifi                   | Classification  |                  | Classification procedure  |  |  |
| -                          |   |                  | -   |  |  |
| 16.5.                      | Relevant H statements (num  |                  | ber and full text)  |  |  |
|                            |   | 225              | Highly flammable liquid and vapor.  |  |  |
|                            | H:  | 319              | Causes serious eye irritation.  |  |  |
|                            |   | 336              | May cause drowsiness or dizziness.  |  |  |
|                            |   | 360FD            | May damage fertility. May damage the unborn child.  |  |  |
| 16.6.                      | Training advice:  |                  | -   |  |  |
|                            |   |                  | ** "X" in the product code marks different volumes (different packagings of the product)  |  |  |
| 16.7. Further information: |   | her information: | We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet. |  |  |

| ANNEX: Exposure scenario resulting to chemical safety assessment |
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