
MATERIAL SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No 1907/2006

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name: SODIUM HYPOCHLORITE 15%
CAS number: 7681-52-9
EINECS number: 231-668-3
Brand: Solmedia Ltd
Product code: HYP005

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: See table in front of appendix for a complete overview of identified uses

Uses advised against: At this moment we have not identified any uses advised

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification**Classification according to Regulation (EC) No 1272/2008**

REGULATION (EC) No 1272/2008			
Hazard Class	Hazard category	Target Organs	Hazard Statements
Corrosive to metals	Category 1	-	H290
Skin Corrosion	Category 1B	-	H314
Serious eye damage	Category 1	-	H318
Short-term (acute) aquatic hazard	Category 1	-	H400
Long-term (chronic) aquatic hazard	Category 2	-	H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects:

Human Health

See section 11 for toxicological information.

Physical and chemical hazards

See section 9/10 for physicochemical information.

Potential environmental effects

See section 12 for environmental information.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008****Hazard symbols**

Signal words: Danger

Hazard statement: H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.
H410: Very toxic to aquatic life with long lasting effects

Precautionary statements:

Prevention P273: Avoid release into the environment.
P260: Do not breathe gas/ mist/ vapours/ spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 + P310: IF exposed or concerned: Immediately call a POISON CENTRE/doctor.

P313: Get medical advice/ attention

Disposal

P501: Dispose of contents/ container in accordance with the local/regional/international regulations

Additional Labelling:

EUH031 Contact with acids liberates toxic gas.

Hazardous components which must be listed on the label:

- sodium hypochlorite, solution

2.3 Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

Chemical nature: Aqueous solution

			Classification (Regulation (EC) No 1272/2008)	
Hazardous components		Amount (%)	Hazard class/ Hazard category	Hazard Statements
sodium hypochlorite, solution				
Index No	017-011-00-1	>= 10 - <= 15	Met. Corr.1	H290
CAS No	7681-52-9		Skin Corr.1B	H314
EC No	231-668-3		STOT SE	H335
EU REACH – Reg No	01-2119488154- 34-xxxx		Aquatic Acute1 Aquatic Chronic1	H400 H410
sodium hydroxide				
Index No	011-002-00-6	< 1	Met. Corr.1	H290
CAS No	1310-73-2		Skin Corr. 1A	H314
EC No	215-185-5		Eye Dam 1	H318
EU REACH- Reg No	01-2119457892- 27-xxxx			

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: Take off all contaminated clothing immediately.

If Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Skin contact:	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician immediately.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed:	Rinse mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	See Section 11 for more detailed information on health effects and symptoms. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.
Effects:	See Section 11 for more detailed information on health effects and symptoms. Causes severe skin burns and eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting

Heating or fire can release toxic gas.

Hazardous combustion products

Chlorine, Hydrogen chloride gas, chlorine oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

Further advice

Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise - with risk of bursting. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Wear respiratory protection. Keep away unprotected persons. Provide adequate ventilation. Danger of slipping if spilled. Avoid contact with skin, eyes and clothing. Do not breathe vapour.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases

6.3 Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal. Do not keep the container sealed.

Further information

Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on personal protective equipment.

See Section 13 for waste treatment information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Do not keep the container sealed. Handle and open container with care. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures

Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage areas and containers**

Keep in an area equipped with alkali resistant flooring. Keep only in the original container. Store in a receptacle equipped with a vent.

Advice on protection against fire and explosion

The product is not flammable. Normal measures for preventive fire protection.

Further information on storage conditions

Keep in a well-ventilated place. Protect against light. Store in cool place.

Advice on common storage

Keep away from food, drink and animal feeding stuffs. Do not store together with acids and ammonium salts.

Suitable packaging materials

Polyethylene, Polyvinylchloride

Unsuitable packaging materials

Iron, Copper, Aluminium, Stainless steel

7.3 Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

Component: Sodium hypochlorite, solution **CAS-No. 7681-52-9**

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL

Workers, Acute - systemic effects, Acute - local effects, Inhalation 3.1 mg/m³

DNEL

Workers, Long-term - systemic effects, Long-term – local Effects, Inhalation 1.55 mg/m³

DNEL

Workers, Long-term – local effects, Skin contact 0.5 %

DNEL

Consumers, Long-term - systemic effects, Long-term – local effects, Inhalation 1.55 mg/m³

DNEL

Consumers, short-term, Inhalation 3.1 mg/m³

DNEL

Consumers, Long-term - systemic effects, Ingestion 0.26 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh Water 0.21 µg/l

Marine Water 0.042 µg/l

Sewage treatment plant (STP) 0.03 mg/l

Intermittent releases 0.26 µg/l

Soil

Exposition is not expected

Marine sediment

Exposition is not expected.

Fresh water sediment

Exposition is not expected.

Component: **Sodium hydroxide** **CAS-No. 1310-73-2**
Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), Short Term Exposure Limit (STEL):
 2 mg/m³

ELV (IE), Short Term Exposure Limit (STEL):
 2 mg/m³

Component: **chlorine** **CAS-No. 7782-50-5**
Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), Short Term Exposure Limit (STEL):
 0.5 ppm, 1.5 mg/m³

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC,
 2009/161/EU, 2017/164/EU, Short Term Exposure Limit (STEL):
 0.5 ppm, 1.5 mg/m³
 Indicative

ELV (IE), Short Term Exposure Limit (STEL):
 0.5 ppm, 1.5 mg/m³
 Indicative OELV

8.2 Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection:

Advice	Use respirator with appropriate filter if vapours or aerosol are released. Respiratory protection complying with EN 141. Recommended Filter type: Combination filter: B-P2 Combination filter: B-P3 In case of intensive or longer exposure use self-contained breathing apparatus.
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Hand protection:

Advice	Protective gloves complying with EN 374. The glove material has to be impermeable and resistant to the product / the substance / the preparation. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear.
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Material	Butyl-rubber
Break through time	8 Hour
Glove thickness	0.5 mm
Material	Polyvinylchloride
Break through time	8 Hour
Glove thickness	0.5 mm
Material	Polychloroprene
Break through time	8 Hour
Glove thickness	0.5 mm

Eye protection

Advice	Tightly fitting safety goggles Ensure that eyewash stations and safety showers are close to the workstation location
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Skin and body protection

Advice	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear appropriate chemical resistant clothing and boots. alkali resistant protective clothing
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Environmental exposure controls

General Advice	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.
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SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form:	Liquid
Colour:	Yellow to green
Odour:	of chlorine
Solubility in water:	Soluble
Odour Threshold:	no data available
pH	> 11
Melting point/range	ca. -30 - -20 °C 13 - 16% solution 851 °C - lit.
Boiling point/range°C:	ca. 100 °C (1013 hPa) 13 - 16% solution

Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	
	Not applicable
Upper explosion limit	
	Not applicable
Lower explosion limit	
	Not applicable
Vapour pressure	
	ca. 20 hPa (20 °C) 13 - 16% solution
Relative vapour density	
	no data available
Density	1.11 g/cm ³ (20 °C) 10% solution 1.317 g/cm ³ (20 °C) 15% solution 1.24 g/cm ³ (20 °C) 20% solution
Water solubility	completely miscible
Partition coefficient: n-octanol/water	
	log K _{ow} -3.42 (20 °C)
Auto-ignition temperature	
	no data available
Thermal decomposition	
	> 111 °C
Viscosity, dynamic	
	3 - 4 mPa.s (20 °C) 13 - 16% solution
Explosivity	Product is not explosive.
Oxidizing properties	Oxidizing agents

9.2 Other safety information

Corrosion to metals	Corrosive to metals
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SECTION 10: Stability and reactivity

10.1 Reactivity

Advice

Contact with acids liberates toxic gas.

10.2 Chemical stability**Advice**

Decomposes on heating.

Decomposes on exposure to light.

10.3 Possibility of hazardous reactions

May develop chlorine if mixed with acidic solutions.

10.4 Conditions to avoid**Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition.

Keep away from direct sunlight.

Thermal decomposition > 111 °C

10.5 Incompatible materials**Materials to avoid**

Acids, ammonium compounds, Acetic anhydride, Organic materials, Hydrogen peroxide, metal salts, Copper, Nickel, Iron

10.6 Hazardous decomposition products

Hydrogen chloride gas, Chlorine, chlorine oxides.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Oral**

Please find this information in the listing of the component/components below in this section.

Inhalation

Not classified based on the calculation method according to CLP regulation.

Dermal

Not classified based on the calculation method according to CLP regulation.

Irritation**Skin**

Causes severe skin burns and eye damage.

Eyes

Causes eye burns.

Sensitisation

Not classified based on the calculation method according to CLP regulation.

CMR effects**CMR Properties****Carcinogenicity**

Not classified based on the calculation method according to CLP regulation.

Mutagenicity Not classified based on the calculation method according to CLP regulation.

Teratogenicity Not classified based on the calculation method according to CLP regulation.

Reproductive toxicity Not classified based on the calculation method according to CLP regulation.

Specific Target Organ Toxicity

Single exposure Not classified based on the calculation method according to CLP regulation.

Repeated exposure Not classified based on the calculation method according to CLP regulation.

Other toxic properties

Repeated dose toxicity No data available

Aspiration hazard Not applicable

Component: Sodium Hypochlorite, solution **CAS-No. 7681-52-9**

Acute Toxicity		
Oral	LD50	> 1100 mg/kg (Rat; Test substance: Chlorine) (OECD Test Guideline 401)
Inhalation	LC50	> 10.5 mg/l (Rat; 1 h; Test substance: Chlorine) (OECD Test Guideline 403)
Dermal	LD50	> 20000 mg/kg (Rabbit; Test substance: Chlorine) (OECD Test Guideline 402)

Irritation		
Skin	Result	Severe skin irritation (Rabbit) (OECD Test Guideline 404) corrosive effects (human)
Eyes	Result	Causes serious eye damage. (Rabbit) (OECD - Guideline 405)
Sensitisation	Result	not sensitizing (Buehler Test; Guinea pig) (OECD Test Guideline 406)

CMR Effects		
CMR Properties	Carcinogenicity	Animal testing did not show any carcinogenic effects.
	Mutagenicity	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
	Teratogenicity	Did not show teratogenic effects in animal experiments.
	Reproductive toxicity	Animal testing did not show any effects on fertility.
Genotoxicity in vitro	Result	Negative (Ames test; Salmonella typhimurium) (OECD Test Guideline 471) ambiguous (Chromosome aberration test in vitro; Chinese hamster fibroblasts) (OECD Test Guideline 473)

Genotoxicity in vivo	Result	negative (Chromosome aberration test in vivo; Mouse) (OECD Test Guideline 474) negative (Chromosome aberration test in vivo; Mouse) (OECD Test Guideline 475) ambiguous (Effects on sperm morphology and melotic micronuclei; Mouse)
Teratogenicity	NOAEL Teratog.	5.7 mg/kg (Rat)Test substance Chlorine
Reproductive toxicity	NOAEL Parent	5 mg/kg (Rat)(Oral)Effects on fertility Test substance Chlorine

Specific Target Organ Toxicity		
Single exposure	Inhalation	Target Organs: Respiratory system May cause respiratory irritation. Experience with human exposure
Repeated exposure	Remarks	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other Toxic Properties			Other toxic properties
Repeated dose toxicity	NOAEL	50 mg/kg (Rat)(Oral; 90 Days) (OECD Test Guideline 408)	
Aspiration hazard		No aspiration toxicity classification	

Further Information

Other relevant toxicity information If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

SECTION 12: Ecological information

12.1 Toxicity

Chronic Toxicity

Long-term (chronic) aquatic hazard

Very toxic to aquatic life with long lasting effects.

Component: Sodium Hypochlorite, solution **CAS-No. 7681-52-9**

Acute Toxicity		
Fish	LD50	0.06 mg/l (Salmo gairdneri; 96 h)
	NOEC	0.04 mg/l (Menidia peninsulae (tidewater silverside); 96 h)
Toxicity to daphnia and other aquatic invertebrates	EC50	0.141 mg/l (Daphnia magna (Water flea); 48 h)

Algae	NOEC	0.0021 mg/l (algae; 7 Days) Fresh water
Bacteria	EC50	> 3 mg/l (activated sludge; 3 h)

Chronic Toxicity		
Fish	NOEC	0.04 mg/l (Menidia peninsulae (tidewater silverside); 28 d)
Aquatic invertebrates	NOEC	0.007 mg/l (Eastern oyster (Crassostrea virginica); 15 d) Marine water

M Factor

M-Factor (Acute Aquat. Tox.) 10

M-Factor (Chron. Aquat. Tox.) 1

12.2 Persistence and degradability
Component: Sodium Hypochlorite, solution **CAS-No. 7681-52-9**

Persistence and Degradability		
Persistence	Result	The product can be degraded by abiotic (e.g. chemical or photolytic) processes. decomposition by hydrolysis. Half-life in fresh-water < 1 day
Biodegradability	Result	The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Bioaccumulation Result log Kow -3.42 (20 °C)

Does not bioaccumulate.

12.4 Mobility in soil

Water The product is mobile in water environment.

Soil Highly mobile in soils

Air Not volatile (Henry's Constant)

12.5 Results of PBT and vPvB assessment

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.

The PBT or vPvB criteria of Annex XIII to the REACH Regulation does not apply to inorganic substances.

12.6 Other adverse effects**Additional ecological information**

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging

Dispose of contaminated packaging in the same way as the product. In accordance with local and national regulations. Empty containers retain residue and can be dangerous.

European Waste Catalogue Number

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

14.1. UN number

1791

14.2. UN proper shipping name

ADR	HYPOCHLORITE SOLUTION
RID	HYPOCHLORITE SOLUTION
IMDG	HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es)

ADR-Class	8
(Labels; Classification Code; Hazard identification No; Tunnel restriction code)	
	8; C9; 80; (E)
RID-Class	8
(Labels; Classification Code; Hazard identification No)	
	8; C9; 80
IMDG-Class	8
(Labels; EmS)	8; F-A, S-B

14.4. Packaging group

ADR	II
RID	II
IMDG	II

14.5. Environmental hazards

Environmentally hazardous according to ADR

yes

Environmentally hazardous according to RID

yes

Marine Pollutant according to IMDG-Code

Yes

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG	Not applicable.
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SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)**

Point Nos.: , 3; Listed

EU. Directive 2012/18/EU (SEVESO III) Annex I

Lower-tier requirements: 100 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Upper-tier requirements: 200 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Lower-tier requirements: 200 tonnes; Part 1: Categories of dangerous substances; E2: Hazardous to the Aquatic Environment in Category Chronic 2

Upper-tier requirements: 500 tonnes; Part 1: Categories of dangerous substances; E2: Hazardous to the Aquatic Environment in Category Chronic 2

EU. Regulation EU No. 649/2012 concerning the export and import of dangerous chemicals

The substance/mixture does not fall under this legislation.

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)

Point Nos.: , 3; Listed

EU. Regulation No 1451/2007 [Biocides], Annex I, OJ (L 325)

EC Number: , 231-668-3; Listed

EU. Directive 2012/18/EU (SEVESO III) Annex I

Lower-tier requirements: 100 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Upper-tier requirements: 200 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

UK. Releases to air and water (UK ISR)

Annual reporting level threshold: 10,000 kg

WGK (DE)

WGK 2: obviously hazardous to water: 815

Notification status
Sodium Hypochlorite, Solution:

Regulatory List	Notification	Notification number
AICS	Yes	
DSL	Yes	
EINECS	Yes	231-668-3
ENCS (JP)	Yes	(1)-237
IECSC	Yes	
ISHL (JP)	Yes	(1)-237
KECI (KR)	Yes	KE-31506
NZIOC	Yes	HSR003698
PICCS (PH)	Yes	
TSCA	Yes	

Sodium Hydroxide
CAS-No. 1310-73-2

Regulatory List	Notification	Notification number
AICS	Yes	
DSL	Yes	
EINECS	Yes	215-185-5
ENCS (JP)	Yes	(1)-410

IECSC	Yes	
ISHL (JP)	Yes	(1)-410
KECI (KR)	Yes	97-1-136
KECI (KR)	Yes	KE-31487
NZIOC	Yes	HSR001547
PICCS (PH)	Yes	
TSCA	Yes	

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effect

Abbreviations and Acronyms

- BCF Bioconcentration factor
- BOD Biochemical oxygen demand
- CAS Chemical Abstracts Service
- CLP Classification, Labelling and Packaging
- CMR Carcinogenic, mutagenic or toxic to reproduction
- COD Chemical oxygen demand
- DNEL Derived no-effect level
- EINECS European Inventory of Existing Commercial Chemical Substances
- ELINCS European List of Notified Chemical Substances

GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LC50	Median lethal concentration
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect
NLP	No-longer polymer
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational exposure limit
PBT	Persistent, bioaccumulative and toxic
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
PNEC	Predicted no-effect concentration
STOT	Specific target organ toxicity
SVHC	Substance of very high concern
UVCB	Substance of unknown or variable composition, complex reaction products or biological materials
vPvB	Very persistent and very bioaccumulative

Other information

Key literature references and sources for data

Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Methods used for product classification

The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data

Hints for trainings

The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.