
MATERIAL SAFETY DATA SHEET

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

Product name: SODIUM HYDROXIDE 0.2MOL/L (0.2N) AQUEOUS SOLUTION
CAS number: 1310-73-2
EINECS/EC number: 215-185-5
Product code: TS16 (125717150)
Synonyms: N/A
Brand: Solmedia

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

Identified uses: Test reagent

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**2.1 Classification of the substance or mixture**

According to Regulation (EC) No. 1272/2008.

Hazard classes and hazard categories	Hazard statements
Eye irritation, category 2	H319
Skin irritation, category 2	H315
Substance or mixture corrosive to metals, category 1	H290

2.2 Label elements**2.2.1 Labelling according to Regulation (EC) No. 1272/2008 (CLP)**



Signal word: Warning

Hazard Statements

H319 Causes serious eye irritation

H315 Causes skin irritation.

H290 May be corrosive to metals.

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection

P302+352 IF ON SKIN: Wash with plenty of water/...

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

SVHC NO

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

Component	Concentration	Product identifier	Hazard Class & Category
Sodium hydroxide	0.5-2%	CAS NO: 1310-73-2 EC: 215-185-5 Reach NO. 01-2119457892-27-XXXX	Skin corrosion category 1A H314

SECTION 4: First aid measures

4.1 Description of first aid measures

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with the skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact

In case of contact with the eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting. Giving nothing to eat or drink.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

4.4 Self-protection of the first aider First aider:

Pay attention to self-protection!

4.5 Information to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings. Extinguishing media which must not be used for safety reasons no restriction

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic

5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

6.4 Additional information

Clear spills immediately.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:
Inhalation skin contact Eye contact

7.2 Conditions for safe storage, including any incompatibilities storage temperature:

15-25 °C Storage class: 8B Keep in a cool, well-ventilated place.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Sodium Hydroxide GESTIS UK STV 2mg/³

8.2 Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(Without touching glove's outer surface) to avoid skin contact with this product. Dispose of

Contaminated gloves after use in accordance with applicable laws and good laboratory practices.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

Splash contact Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

Wash and dry hands.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK

(EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection:

Goggles recommended during refilling: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Additional Information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Control of environmental exposure

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.

8.2.3 Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: colourless

b) Odour

No data available

c) Odour Threshold

No data available

d) pH

>13 (20°

e) Melting point/freezing point

No data available

f) Initial boiling point and boiling range

>105 °C (1013hPa)

g) Flash point not applicable

h) Evaporation rate

No data available

i) Flammability (solid, gas)

No data available

j) Upper/lower flammability or explosive limits

No data available

k) Vapour pressure

No data available

l) Vapour density

No data available

m) Relative density 1.02g/cm³

n) Water solubility

No data available

o) Partition coefficient: noctanol/water

No data available

p) Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

r) Viscosity

No data available

s) Explosive properties

No data available

t) Oxidizing properties

No data available

9.2 Other safety information

Bulk density: no data available

Refraction index: no data available

Dissociation constant: no data available

Surface tension: no data available

Henry constant: no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Formation of explosive mixtures with: Metal, base light metals Formation of: Hydrogen
Violent reaction with: Acid Oxidising agent, strong

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Substance, organic Metal

10.6 Hazardous decomposition products

No data available

10.7 Additional Information

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects acute oral toxicity: no data available

Acute dermal toxicity: no data available

Acute inhalation toxicity: no data available

Irritant and corrosive effects Primary irritation to the skin: not applicable Irritation to eyes: not applicable Irritation to respiratory tract: not applicable

Respiratory or skin sensitisation In case of skin contact: not sensitising

After inhalation: not sensitising

STOT-single exposure not applicable

STOT-repeated exposure not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Carcinogenicity No indication of human carcinogenicity.

Germ cell mutagenicity No indications of human germ cell mutagenicity exist.

Reproductive toxicity No indications of human reproductive toxicity exist.

Aspiration hazard not applicable Other adverse effects no data available

Additional information no data available

SECTION 12: Ecological information

12.1 Ecotoxicity

Acute (short-term) fish toxicity: no data available

Chronic (long-term) fish toxicity: no data available

Acute (short-term) daphnia toxicity: no data available

Chronic (long-term) daphnia toxicity: no data available

Acute (short-term) algae toxicity: no data available

Chronic (long-term) algae toxicity: no data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

Appropriate disposal / Package Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

Additional information no data available

SECTION 14: Transport information

14.1 Land transport (ADR/RID) 14.1 UN-No.: 1824

14.2 Proper Shipping Name: SODIUM HYDROXIDE SOLUTION

14.3 Class(es): 8 Classification code: C5 Hazard label(s): 8

14.4 Packing group: III

14.5 Environmental hazards: No

14.6 Special precautions for user: Hazard identification number (Kemler No.): 80 tunnel restriction code: E (Passage forbidden through tunnels of category E.)

Sea transport (IMDG)

14.1 UN-No.: 1824

14.2 Proper Shipping Name: SODIUM HYDROXIDE SOLUTION

14.3 Class(es): 8 Classification code: Hazard label(s): 8

14.4 Packing group: III

14.5 Environmental hazards: No MARINE POLLUTANT: No

14.6 Special precautions for user: Segregation group: 18 EmS-No. F-A S-B

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

14.1 UN-No.: 1824

14.2 Proper Shipping Name: SODIUM HYDROXIDE SOLUTION

14.3 Class(es): 8 Classification code: C5 Hazard label(s): 8

14.4 Packing group: III

14.5 Special precautions for user not relevant

SECTION 15: Regulatory information

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

General rules Water hazard class (WGK):

EU: 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 (Text with EEA relevance)

EU: 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 (Text with EEA relevance)

EU: Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance)

15.2 Chemical Safety Assessment

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 as amended by Regulation (EU) 2015/830.

SECTION 16: Other information

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.