

#### **MATERIAL SAFETY DATA SHEET**

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

**Product name:** Testing Solution No. 32 Sodium Hydroxide Solution 1N in aqueous solution 1N SODIUM HYDROXIDE

**Product Number:** TS32, 129129150, 129129144

**Brand:** Solmedia Ltd

## 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

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

## 2.2 Label elements



Signal word: Corrosive

## 2.2.1 Labelling according to Regulation (EC) No. 1272/2008 [CLP]

# **Hazard statements**

H314 Causes severe skin burns and eye damage.

H290 May be corrosive to metals

## **Precautionary statements**



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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P309+P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

#### Other hazards

**SVHC: No** 

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not relevant (Product identifier)

#### 3.2 Mixtures

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

			Classification	
			(Regulation (EC) No 1272/2008 [CLP]	
Hazardous Components		Amount [%]	Hazard class/	Hazard
			Hazard category	Statements
Name:	Sodium hydroxide	2-5%	SKIN CORR. CAT.	H314
CAS NO.	1310-73-2		1A.MET. CORR.	H290
EC-NO.	215-185-5		CAT. 1, EYE DAM.	H318
EU REACH-	01-2119457892-27		CAT. 1.	
REG. NO.				

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

## **General information**

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 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 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. Give 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: Nitrogen oxides (NOx) Sulphur oxides

# 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



Avoid generation of dust. Do not breathe dust. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

## 6.2 Environmental precautions

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. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). 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

Avoid: Inhalation Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Protect from moisture.

## 7.2 Conditions for safe storage, including any incompatibilities

Storage temperature: 15-25 °C

Storage class: 8B

Keep container tightly closed in a cool, well-ventilated place.

## 7.3 Specific end use(s)

No data available

## **SECTION 8: Exposure controls/personal**

# 8.1 Control parameters

Sodium hydroxide GESTIS UK STV 2 mg/m<sup>3</sup>

#### 8.2 Exposure controls

# 8.2.1 Appropriate engineering 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.

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

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid, clear

Colour: colourless

- b) Odour No data available
- c) Odour Threshold No data available
- d) pH No data available
- e) Melting point/freezing point No data available
- f) Initial boiling point and boiling range No data available
- 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
- I) Vapour density No data available
- m) Relative density 1.000 g/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

No data available

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity



No data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

# 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

No data available

## **10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Sodium oxides

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

Other decomposition products - No data available

In the event of fire: see section 5

## **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: Causes severe skin burns and eye damage.

Irritation to eyes: Causes serious eye damage.

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 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

This substance/mixture contains no components considered to be either persistent, bioaccumulative or toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# 12.6 Other adverse effects

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

# **Contaminated packaging**

Dispose of as unused product.

## **SECTION 14: Transport information**

# Land transport (ADR/RID)

**14.1** UN-No.: 3266



14.2 Proper Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. 1

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.: 3266

14.2 Proper Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

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

14.4 Packing group: III 14.5 Environmental hazards: No

14.5 MARINE POLLUTANT: No

**14.6** Special precautions for user: Segregation group: - 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.: 3266

14.2 Proper Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.,

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

#### **General rules**

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

Water hazard class (WGK): slightly hazardous to water (WGK 1)

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

For this product a chemical safety assessment was not carried out

#### **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.