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. 61

Sodium Hydroxide Solution 5mol/l(5 N) in aqueous solution

5M SODIUM HYDROXIDE

Product Number:

- TS61
- 125721150
- 125721144

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
- 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

Hazard classes and hazard categories	Hazard statements
Skin corrosion, category 1A	H314

2.2 Label elements



Signal word: Danger

Hazard Statements

H314 Causes severe skin burns and eye damage

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.

2.3 Other hazards

SVHC No

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

Substance Name	Concentration	Product Identifier	Hazard classes and hazard categories
Sodium hydroxide	5-60%	CAS No.: 1310-73-2 EC No.: 215-185-5 REACH No.: 01-2119457892-27	Skin corrosion, category 1A-H314

SECTION 4: First aid measures

4.1 General Information

IF exposed: Immediately call a POISON CENTRE/doctor/…. 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

Immediately call a POISON CENTRE/doctor/…. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

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

Immediately call a POISON CENTRE/doctor/…. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

4.2 Most important symptons and effects, both acute and delayed

No date available

4.3 Indication of any immediate medical attention and special treatment needed

No date 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 for firefighting if necessary.

5.4 Further 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 materials 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 Reference to other sections

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 protection

8.1 Control parameters

Components with workplace control parameters

Sodium hydroxide GESTIS UK STV 2mg/m3

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

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).

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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.

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 necessary at: aerosol or mist formation

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

Control of environmental exposure

No special environmental precautions required.

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.

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 >13 (20 °C)

e) Melting point/freezing point

No data available

f) Initial boiling point and boiling range

109 °C (1013 hPa)

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 <1.11 g/cm^3 (20 °C)

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

Substance, organic Metal

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

Primary irritation to the skin: Causes severe skin burns and eye damage

Serious eye damage/eye irritation

Causes serious eye damage

Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

STOT – single exposure

Not applicable

STOT – repeated exposure

No applicable

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: 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

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 number 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: II

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.) 4.2 Proper Shippling Name Sodium Hydroxide Solution

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: II

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: II

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

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

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

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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.