# Safety Data Sheet

## Section 1 - Identification

### 1.1 Product Identifier

| | | |
|---|---|---|
| Product Name | : | Sodium Hydroxide Solution |
| CAS No. | : | 1310-73-2 |

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

| | | |
|---|---|---|
| Identified uses | : | Laboratory chemicals. |

### 1.3 Details of the supplier of the safety data sheet

| | | |
|---|---|---|
| Company | : | 9920 Pacific Heights Blvd<br>Suit 150<br>San Diego<br>California -92121 |

### 1.4 Emergency Telephone number

| | | |
|---|---|---|
| Emergency phone | : | +1 (858) 245-0283 |

## Section 2 - Hazards Identification

### 2.1 Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1, Sub-Category 1A H314

Full text of H-statements: see section 16

**Adverse physicochemical, human health and environmental effects**

Causes severe skin burns and eye damage.

### 2.2 Label elements

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

Hazard Pictograms (CLP)

GHS05

Signal word (CLP) Warning

**Hazard statements (CLP)**

H314 Causes severe skin burns and eye damage.

**Precautionary statements (CLP)**

P280 Wear 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

P310 Immediately call a doctor.

### 2.3 Other hazards

No additional information available

## Section 3: Composition/information on ingredients

### 3.1 Substance

**Substance type** : Mono-constituent

**Name** : Sodium Hydroxide Pellets

**CAS** : 1310-73-2

**EC NO** : 215-185-5

**EC Index-No.** : 011-002-00-6

### 3.2 Mixtures

Not applicable

## Section 4: First aid measures

### 4.1 Description of first aid measures

**First-aid measures general**

Call a physician immediately.

**First-aid measures after inhalation**

Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

**First-aid measures after skin contact**

Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. Call a physician immediately.

**First-aid measures after eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician immediately.

**First-aid measures after ingestion**

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms/effects after inhalation**

Causes severe skin burns and eye damage.

**Symptoms/effects after skin contact**

Burns.

**Symptoms/effects after eye contact**

Serious damage to eyes.

**Symptoms/effects after ingestion**

Burns.

### 4.3 Indications of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5: Firefighting measurers

### 5.1 Extinguishing Media

**Suitable extinguishing media**

dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry powder. Foam.

**Unsuitable extinguishing media**

Do not use a heavy water stream

### 5.2 Special hazard arising from the substance or mixture

**Hazardous decomposition products in case of fire**

Toxic fumes may be released.

### 5.3 Advice for firefighters

**Protection during firefighting**

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## Section 6: Accidental release measurers

### 6.1 Personal precautions, protective equipment and emergency procedures

### 6.1.1 For non-emergency personnel

**Emergency procedures**

Ventilate spillage area. Evacuate unnecessary personnel.Avoid contact with skin and eyes.Do not breathe dust, fume, gas, mist, spray, vapours.

### 6.1.2 For emergency responders

**Protective equipment**

Do not attempt to take action without suitable protective equipment. FUse personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".

**Emergency procedures**

Stop release.

### 6.2 Environment precautions

Avoid release to the environment.

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleaning up**

Mechanically recover the product. Clear up rapidly by scoop or vacuum.

**Other information**

Dispose of materials or solid residues at an authorized site.

### 6.4 Reference to other sections

For further information refer to section 13.

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

**Precautions for safe handling**

Ensure good ventilation of the work station. Do not breathe dust, fume, gas, mist, spray,vapours. Avoid contact during pregnancy/while nursing. Avoid contact with skin and eyes.Wear personal protective equipment.

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2 Conditions for safe storage, including any incompatibilities

**Technical measures**

Comply with applicable regulations.

**Storage conditions**

Store in original container. Keep container tightly closed. Protect from moisture. Store locked up. Store in a well-ventilated place. Keep cool.

### 7.3 Specific end use(s)

No additional information available.

## Section 8: Exposure controls – Personal protection

### 8.1 Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2 Recommended monitoring procedures

No additional information available

#### 8.1.3 Air contaminants formed

No additional information available

#### 8.1.4 DNEL and PNEC

No additional information available

#### 8.1.5 Control banding

No additional information available

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

**Appropriate engineering controls**

Ensure good ventilation of the work station.

#### 8.2.2 Personal protection equipment

**Personal protective equipment symbol(s)**

#### 8.2.2.1 Eye and face protection

**Eye protection**

Safety glasses.

#### 8.2.2.2 Skin protection

No additional information available

#### 8.2.2.3 Respiratory protection

**Respiratory protection**

Wear appropriate mask.

#### 8.2.2.4 Thermal hazards

No additional information available

### 8.2.3 Environmental exposure controls

**Environmental exposure controls**

Avoid release to the environment.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| **Physical state** | : | Solid |
| **Appearance** | : | White pellets |
| **Molecular Formula** | : | NaOH |
| **Molecular mass** | : | 40 g/mol |
| **Colour** | : | White |
| **Odour** | : | Odourless |
| **Odour threshold** | : | No data available |
| **pH** | : | 13 – 14 (5% Aqueous solution) |

| | | |
|---|---|---|
| **Relative evaporation rate (butylacetate=1)** | : | No data available |
| **Melting point** | : | 318 °C |
| **Freezing point** | : | Not applicable |
| **Boiling point** | : | 1390 °C at 760 mmHg |
| **Flash point** | : | Not applicable |
| **Auto-ignition temperature** | : | Not applicable |
| **Decomposition temperature** | : | No data available |
| **Flammability (solid, gas)** | : | Non flammable |
| **Vapour pressure** | : | < 24 hPa at 20 °C |
| **Relative vapour density at 20 °C** | : | 1.38 (Air = 1.0) |
| **Relative density** | : | No data available |
| **Density** | : | 2.13 g/cm³ at 20°C |
| **Solubility** | : | Water: 111 g/100ml |
| **Partition coefficient n-octanol/water (Log Pow)** | : | No data available |
| **Viscosity, kinematic** | : | Not applicable |
| **Viscosity, dynamic** | : | No data available |
| **Explosive properties** | : | No data available |
| **Oxidising properties** | : | No data available |
| **Explosive limits** | | Not applicable |

**9.2 Other information**

No additional information available

## Section 10: Stability and reactivity

### 10.1 Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4 Conditions to avoid

Direct sunlight. Air contact. Moisture.

### 10.5 Incompatible materials

No additional information available

### 10.6 Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

## Section 11: Toxicological information

### 11.1 Information on toxicological effects

| | | |
|---|---|---|
| **Acute toxicity (oral)** | : | Not classified |
| **Acute toxicity (dermal)** | : | Not classified |
| **Acute toxicity (inhalation)** | : | Not classified |
| **Skin corrosion/irritation** | : | Causes severe skin burns.<br>pH: 13 – 14 (5% Aqueous solution) |
| **Serious eye damage/irritation** | : | Assumed to cause serious eye damage.<br>pH: 13 – 14 (5% Aqueous solution) |

| | | |
|---|---|---|
| **Respiratory or skin sensitisation** | : | Not classified |
| **Germ cell mutagenicity** | : | Not classified |
| **Carcinogenicity** | : | Not classified |
| **Reproductive toxicity** | : | Not classified |
| **STOT-single exposure** | : | Not classified |
| **STOT-repeated exposure** | : | Not classified |
| **Aspiration hazard** | : | Not classified |

**Sodium Hydroxide Pellets (1310-73-2)**

| | | |
|---|---|---|
| **Viscosity, kinematic** | : | Not applicable |

## Section 12: Ecological information

### 12.1 Toxicity

**Ecology - general**

Before neutralisation, the product may represent a danger to aquatic organisms.

**Hazardous to the aquatic environment, short–term(acute)**

Not classified

**Hazardous to the aquatic environment, long–term(chronic)**

Not classified

### 12.2 Persistence and degradability

No additional information available

### 12.3 Bioaccumulative potential

No additional information available

### 12.4 Mobility in soil

No additional information available

### 12.5 Results of PBT and vPvB assessment

No additional information available

### 12.6 Endocrine disrupting properties

No additional information available

## Section 13: Disposal considerations

### 13.1 Waste treatment methods

**Waste treatment methods**

Dispose of contents/container in accordance with licensed collector's sorting instructions.

**Product/Packaging disposal recommendations**

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non- hazardous waste.

## Section 14: Transportation information

### 14.1 UN number

| | | |
|---|---|---|
| UN – No. (ADR) | : | UN 1823 |
| UN – No. (IMDG) | : | UN 1823 |
| UN – No. (IATA) | : | UN 1823 |
| UN – No. (ADN) | : | UN 1823 |
| UN – No. (RID) | : | UN 1823 |

### 14.2 UN proper shipping name

| | | |
|---|---|---|
| **Proper Shipping Name (ADR)** | : | Sodium Hydroxide, Solid |
| **Proper Shipping Name (IMDG)** | : | Sodium Hydroxide, Solid |
| **Proper Shipping Name (IATA)** | : | Sodium Hydroxide, Solid |

| | | |
|---|---|---|
| **Proper Shipping Name (ADN)** | : | Sodium Hydroxide, Solid |
| **Proper Shipping Name (RID)** | : | Sodium Hydroxide, Solid |
| **Transport document description (ADR)** | : | UN 1823 SODIUM HYDROXIDE, SOLID, 8, II, (E) |
| **Transport document description (IMDG)** | : | UN 1823 SODIUM HYDROXIDE, SOLID, 8, II, |
| **Transport document description (IATA)** | : | UN 1823 SODIUM HYDROXIDE, SOLID, 8, II, |
| **Transport document description (ADN)** | : | UN 1823 SODIUM HYDROXIDE, SOLID, 8, II, |
| **Transport document description (RID)** | : | UN 1823 SODIUM HYDROXIDE, SOLID, 8, II, |

**14.3 Transport hazard class(es)**

**ADR**

| | | |
|---|---|---|
| **Transport hazard class(es) (ADR)** | : | 8 |
| **Danger labels (ADR)** | : | 8 |
| | : |  |



**IMDG**

| | | |
|---|---|---|
| **Transport hazard class(es) (IMDG)** | : | 8 |
| **Danger labels (IMDG)** | : | 8 |
| | : |  |



**IATA**

| | | |
|---|---|---|
| **Transport hazard class(es) (IATA)** | : | 8 |

**Danger labels (IATA)** : 8

: 


**ADN**

**Transport hazard class(es) (ADN)** : 8

**Danger labels (ADN)** : 8

: 


**RID**

**Transport hazard class(es) (RID)** : 8

**Danger labels (RID)** : 8

: 


## 14.4 Packing group

**Packing group (ADR)** : II

**Packing group (IMDG)** : II

**Packing group (IATA)** : II

**Packing group (ADN)** : II

**Packing group (RID)** : II

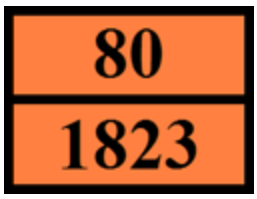
**14.5 Environmental hazards**

| | | |
|---|---|---|
| **Dangerous for the environment** | : | No |
| **Marine pollutant** | : | No |
| **Other information** | : | No supplementary information available |

**14.6 Special precautions for user**

**Overland transport**

| | | |
|---|---|---|
| **Classification code (ADR)** | : | C6 |
| **Limited quantities (ADR)** | : | 1kg |
| **Excepted quantities (ADR)** | : | E2 |
| **Packing instructions (ADR)** | : | P002, IBC08 |
| **Special packing provisions (ADR)** | : | B4 |
| **Mixed packing provisions (ADR)** | : | MP10 |
| **Portable tank and bulk container instructions (ADR)** | : | T3 |
| **Portable tank and bulk container special provisions (ADR)** | : | TP33 |
| **Tank code (ADR)** | : | SGAN |
| **Vehicle for tank carriage** | : | AT |
| **Transport category (ADR)** | : | 2 |
| **Special provisions for carriage - Packages (ADR)** | : | V11 |
| **Hazard identification number (Kemler No.)** | : | 80 |

| | | |
|---|---|---|
| **Orange plates** | : |   |
| **Tunnel restriction code (ADR)** | : | E |
| **EAC code** | : | 2W |
| **Transport by sea** | | |
| **Limited quantities (IMDG)** | : | 1kg |
| **Excepted quantities (IMDG)** | : | E2 |
| **Packing instructions (IMDG)** | : | P002 |
| **IBC packing instructions (IMDG)** | : | IBC08 |
| **IBC special provisions (IMDG)** | : | B21 , B4 |
| **Tank instructions (IMDG)** | : | T3 |
| **Tank special provisions (IMDG)** | : | TP33 |
| **EmS-No. (Fire)** | : | F-A |
| **EmS-No. (Spillage)** | : | S-B |
| **Stowage category (IMDG)** | : | A |
| **Segregation (IMDG)** | : | SGG18, SG35 |
| **Properties and observations (IMDG)** | : | White pellets, flakes, lumps or solid blocks, deliquescent. Reacts with ammonium salts,evolving ammonia gas. In the presence of moisture, corrosive to aluminium, zinc and tin.Causes burns to skin, eyes and mucous membranes. Reacts violently with acids. |
| **MFAG-No** | : | 154 |
| **Air transport** | | |

| | | |
|---|---|---|
| **PCA Excepted quantities (IATA)** | : | E2 |
| **PCA Limited quantities (IATA)** | : | Y844 |
| **PCA limited quantity max net quantity (IATA)** | : | 5kg |
| **PCA packing instructions (IATA)** | : | 859 |
| **PCA max net quantity (IATA)** | : | 15kg |
| **CAO packing instructions (IATA)** | : | 863 |
| **CAO max net quantity (IATA)** | : | 50kg |
| **ERG code (IATA)** | : | 8L |
| **Inland waterway transport** | | |
| **Classification code (ADN)** | : | C6 |
| **Limited quantities (ADN)** | : | 1KG |
| **Excepted quantities (ADN)** | : | E2 |
| **Equipment required (ADN)** | : | PP , EP |
| **Number of blue cones/lights (ADN)** | : | 0 |
| **Rail transport** | | |
| **Classification code (RID)** | : | C6 |
| **Limited quantities (RID)** | : | 1kG |
| **Excepted quantities (RID)** | : | E2 |
| **Packing instructions (RID)** | : | P002 , IBC08 |
| **Special packing provisions (RID)** | : | B4 |
| **Mixed packing provisions (RID)** | : | MP10 |
| **Portable tank and bulk container instructions (RID)** | : | T3 |

| | | |
|---|---|---|
| **Portable tank and bulk container special provisions (RID)** | : | TP33 |
| **Tank codes for RID tanks (RID)** | : | SGAN |
| **Transport category (RID)** | : | 2 |
| **Special provisions for carriage – Packages (RID)** | : | W11 |
| **Colis express (express parcels) (RID)** | : | CE10 |
| **Hazard identification number (RID)** | : | 80 |

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## Section 15: Regulatory information

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

### 15.1.1 EU-Regulations

No REACH Annex XVII restrictions
SODIUM HYDROXIDE PELLETS is not on the REACH Candidate List
SODIUM HYDROXIDE PELLETS is not on the REACH Annex XIV List
SODIUM HYDROXIDE PELLETS is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.
SODIUM HYDROXIDE PELLETS is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

### 15.1.2 National regulations

**Germany**

| | | |
|---|---|---|
| **Water hazard class (WGK)** | : | WGK 1, Significantly hazardous to water (Classification according to AwSV; ID No. 142) |

| | | |
|---|---|---|
| **Hazardous Incident Ordinance (12. BImSchV)** | : | Is not subject of the Hazardous Incident Ordinance (12. BImSchV) |
| **Netherlands** | | |
| **SZW-lijst van kankerverwekkende stoffen** | : | The substance is not listed |
| **SZW-lijst van mutagene stoffen** | : | The substance is not listed |
| **NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding** | : | The substance is not listed |
| **NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid** | : | The substance is not listed |
| **NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling** | : | The substance is not listed |
| **Denmark** | | |
| **Danish National Regulations** | : | Young people below the age of 18 years are not allowed to use the product |

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out

## Section 16: Other information

### Further information

The information and recommendations in this SDS are to the best of our knowledge, information and belief accurate at the time of publication. Although utmost care is been taken in composition of this text, Highpuric LLC cannot be held responsible for any damage resulting from any possible error in this publication.