



## Safety Data Sheet

Date of Issue: 03.08.2020

Date of Expiry: 03.08.2025

### 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Distributor Name : **ECP Limited**  
Address : PO Box 34125, Birkenhead, Auckland 0746  
Telephone : +64 9 480 4386  
Facsimile : +64 9 480 4385  
Emergency phone number : 0800 243 622 (24 hours)

Supplier Company : **CHEM-SUPPLY PTY LTD**  
Address : 38 - 50 Bedford Street GILLMAN SA 5013 Australia  
Telephone : (08) 8440-2000

Product	Sodium Hydroxide Pellets			Code	SA178
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
1310-73-2	HSR001547	1823	8	II	

Recommended use : Laboratory Investigations

### 2: Hazards identification

#### 2.1 GHS Classification

Skin corrosion (Category A), H314

Aquatic toxicity (Acute or Chronic) (Category D), H402

#### Hazard Pictogram



Signal Word : DANGER

#### Hazard statement(s)

H314 : Causes severe skin burns and eye damage.

H402 : Harmful to aquatic life.

#### Precautionary statement(s)

##### Prevention

P260 : Do not breathe dust or mist.

P264 : Wash skin thoroughly after handling.

P273 : Avoid release to the environment.

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): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

P310 : Immediately call a POISON CENTER or doctor/ physician.  
P321 : Specific treatment (see supplemental first aid instructions on this label).  
P363 : Wash contaminated clothing before reuse.

#### **Storage**

P405 : Store locked up.

#### **Disposal**

P501 : Dispose of contents/ container to an approved waste disposal plant.

### **2.3 Other hazards - none**

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

**Substance / Mixture : Substance**

### **3.1 Substances**

Synonyms : Caustic soda  
Formula : NaOH  
Molecular weight : 40.01 g/mol  
CAS-No. : 1310-73-2  
EC-No. : 215-185-5  
Index-No. : 011-002-00-6

## **4: First aid measures**

### **4.1 Description of first aid measures**

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.  
Consult a physician.

#### **In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## **5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## 5.2 Special hazards arising from the substance or mixture

Sodium oxides

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 5.4 Further information

No data available

## 6: Accidental release measures

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

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place.

## 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Components with workplace control parameters

#### Derived No Effect Level (DNEL)

Application Area	Exposure routes	Health effect	Value
Workers	Inhalation	Long-term local effects	1 mg/m <sup>3</sup>
Consumers	Inhalation	Long-term local effects	1 mg/m <sup>3</sup>

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

### **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**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Form	:	Solid
Appearance	:	White, deliquescent flakes, pellets or minipeal.
Odour	:	Odourless.
Melting Point	:	318 - 323 °C
Boiling Point	:	1390 °C @ 760 mm Hg
Solubility in Water	:	Soluble.
Solubility in Organic Solvents	:	Soluble in alcohol and glycerol. Insoluble in acetone and ether.
Specific Gravity	:	2.130 @ 20 °C
pH	:	12 (0.05% soln); 13 (1% soln); 14 (5% soln)
Odour Threshold	:	Odourless.
Flammability	:	Non-combustible.
Molecular Weight	:	40.01

**Other Information** : Absorbs water and carbon dioxide from the air.

## **10: Stability and reactivity**

### **Chemical Stability**

Stable under normal use conditions. Hygroscopic  
Slowly absorbs moisture from air, reacting with carbon dioxide and forming sodium carbonate.

### **Conditions to Avoid**

Exposure to moisture. Exposure to air. Dust generation. Incompatibles.

### **Incompatible Materials**

Strong acids, ally alcohol, ally chloride, phosphorus, metals (aluminium, magnesium, tin, zinc), nitro compounds (nitroethane, nitromethane, nitroparaggins, nitropropane) and chloro organic compounds, organic halogen compounds (trichloroethylene), water.

### **Hazardous Decomposition Products**

Sodium oxide.

### **Possibility of hazardous reactions**

May react violently with strong acids. In contact with water, reaction may generate enough heat to ignite combustible materials. In contact with metals, reaction may produce flammable and explosive hydrogen gas. May react with organ halogen compounds to form spontaneously combustible compounds. May react explosively in contact with nitro and chloro organic compounds. May form

explosive products with ammonia plus silver nitrate, benzene and benzene sulfonyl chloride, tetrahydrofuran, sodium tetrahydroborate, and trichlorophenol sodium salt plus methyl alcohol plus trichlorobenzene plus heat.

### **Hazardous Polymerization**

Will not occur

## **11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

No data available

#### **Skin corrosion/irritation**

Skin - Rabbit

Result: Severe skin irritation - 24 h

Remarks: (RTECS)

#### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Causes serious eye irritation.

(OECD Test Guideline 405)

Causes serious eye damage.

#### **Respiratory or skin sensitisation**

Patch test: - Human

Result: negative

Remarks: (ECHA)

#### **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**

Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Acute inhalation toxicity - burns of mucous membranes, Cough, Shortness of breath,

Possible damages: damage of respiratory tract

#### **Specific target organ toxicity - repeated exposure**

No data available

#### **Aspiration hazard**

No data available

#### **Additional Information**

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12: Ecological information

### 12.1 Toxicity

#### *Toxicity to fish*

LC50 - *Gambusia affinis* (Mosquito fish) - 125 mg/l - 96 h

Remarks: (ECOTOX Database)

#### *Toxicity to daphnia and other aquatic invertebrates*

EC50 - *Ceriodaphnia* (water flea) - 40.4 mg/l - 48 h

Remarks: (ECHA)

#### *Toxicity to bacteria*

EC50 - *Photobacterium phosphoreum* - 22 mg/l - 15 min

Remarks: (External MSDS)

### 12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

Harmful to aquatic life.

Harmful effect due to pH shift.

Forms corrosive mixtures with water even if diluted.

Neutralisation possible in waste water treatment plants.

Discharge into the environment must be avoided.

## 13: Disposal considerations

### 13.1 Waste treatment methods

#### **Product**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging**

Dispose of as unused product.

## 14: Transport Information Table

		<b>ADR/RID – European packaging certification</b>	<b>IMDG International Maritime Dangerous Goods Code</b>	<b>IATA – DGR International Air Travel Association – Dangerous Goods Regulations</b>
<b>14.1</b>	<b>UN Number</b>	1823	1823	1823
<b>14.2</b>	<b>UN Proper Shipping name</b>	SODIUM HYDROXIDE, SOLID	SODIUM HYDROXIDE, SOLID	Sodium hydroxide, solid
<b>14.3</b>	<b>Transport Hazard Class</b>	8	8	8

14.4	Packaging group	II	II	II
14.5	Environmental Hazards	No	No	No
14.6	Special precautions for user	none		
14.7	Incompatible materials	Strong oxidizing agents, strong acids, organic materials		

#### 15: Regulatory information

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

###### National regulatory information

HSNO Approval Code : HSR001547

HSNO Group Standard Approval: Outside of Group Standard

Tracking Required : not required

Approved Handler Cert. : not required

#### 16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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