

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1Product identifiers

Product name : **Sodium Hydroxide** Pellets

CAS-No. : 1310-73-2

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

| Company | Bio-Chem Chemicals<br>5455 NicholsonRoad, Science Market<br>Ambala Cantt, 133001 - Haryana<br>+91 82952 41953<br>info@biofinechemical.com - www.biofinechemical.com |
|---------|---|

1.4 Emergency Telephone

Number: +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to metals (Category 1), H290 Skin corrosion (Category 1A), H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

C Corrosive R35

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Hazard statement(s)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Danger

Precautionary statement(s)

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for

breathing. Immediately call a POISON CENTER or doctor/ physician.

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

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

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

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

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

#### 3.1 Substances

Synonyms : Caustic soda

Formula : NaOH

Molecular weight : 40,00 g/mol

CAS-No. : 1310-73-2

EC-No. : 215-185-5

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

Registration number : 01-2119457892-27-XXXX

### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

Sodium hydroxide

CAS-No. 1310-73-2 Met. Corr. 1; Skin Corr. 1A; <= 100 %

EC-No. 215-185-5 H290, H314

Index-No. 011-002-00-6

Registration number 01-2119457892-27-XXXX

## Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

Sodium hydroxide

CAS-No. 1310-73-2 C, R35 <= 100 %

EC-No. 215-185-5 Index-No. 011-002-00-6

Registration number 01-2119457892-27-XXXX

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

#### **SECTION 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

## **SECTION 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

#### **SECTION 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.

### **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

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

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

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

### 8.1 Control parameters

#### Components with workplace control parameters

## **Derived No Effect Level (DNEL)**

| Application Area | Exposure | Health effect | Value |
|------------------|----------|---------------|-------|
|                  | routes   |               |       |

Workers Inhalation Long-term local effects 1 mg/m3
Consumers Inhalation Long-term local effects 1 mg/m3

#### 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 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**

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 N100 (US) or type P3 (EN 143) 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 such as NIOSH (US) or CEN (EU).

### 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.

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

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: pellets

Colour: white

b) Odour odourless

c) Odour Threshold No data available

d) pH 14 at 50 g/l at 20 °C

e) Melting point/freezing

point

Melting point/range: 318 °C

f) Initial boiling point and

boiling range

1.390 °C

g) Flash point Not applicableh) Evaporation rate No data available

i) Flammability (solid, gas) No data available

Upper/lower No data available flammability or explosive limits

< 24,00 hPa at 20 °C k) Vapour pressure

4,00 hPa at 37 °C

I) Vapour density 1,38 - (Air = 1.0)m) Relative density 2,1300 g/cm3

ca.1.260 g/l at 20 °C n) Water solubility

o) Partition coefficient: noctanol/water

No data available

p) Auto-ignition No data available temperature

No data available q) Decomposition temperature

Viscosity No data available r) s) Explosive properties No data available Oxidizing properties No data available

#### 9.2 Other safety information

Bulk density ca.1.150 kg/m3 Relative vapour density 1,38 - (Air = 1.0)

### **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

No data available

#### 10.4 Conditions to avoid

No data available

## 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Organic materials

### 10.6 Hazardous decomposition products

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 toxicity**

No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: Causes severe burns. - 24 h

### Serious eye damage/eye irritation

Eyes - Rabbit

Result: Corrosive - 24 h

#### Respiratory or skin sensitisation

Will not occur

### 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: WB4900000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **SECTION 12: Ecological information**

## 12.1 Toxicity

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

LC50 - Oncorhynchus mykiss (rainbow trout) - 45,4 mg/l - 96 h

Toxicity to daphnia and

d Immobilization EC50 - Daphnia (water flea) - 40,38 mg/l - 48 h

other aquatic invertebrates

#### 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

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

12.6 Other adverse effe

Harmful to aquatic life.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

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

### Contaminated packaging

Dispose of as unused product.

### **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 1823 IMDG: 1823 IATA: 1823

### 14.2 UN proper shipping name

ADR/RID: SODIUM HYDROXIDE, SOLID IMDG: SODIUM HYDROXIDE, SOLID IATA: Sodium hydroxide, solid

14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

No data available

### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

#### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Met. Corr. Corrosive to metals

Skin Corr. Skin corrosion

## Full text of R-phrases referred to under sections 2 and 3

C Corrosive

R35 Causes severe burns.

## **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.