

Version: 1.0 Issue date: Oct. 10. 2022

MATERIAL SAFETY DATA SHEET OF POTASSIUM HYDROXIDE

SECTION 1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Supplier: Shanghai Bosman Industrial Co., Ltd

Street address: No. 1611, North Sichuan Road, Hongkou, Shanghai R.P. China

Tel: + 86 21 63065878

Fax: + 86 21 63065878

Product Name: Potassium hydroxide.

Other Name: Caustic potash.

Product use: /

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Corrosive to metals Category 1, Acute toxicity (oral) Category 4, Skin corrosion/irritation Category 1B, Serious eye damage/eye irritation Category 1, Hazardous to the aquatic environment (acute) Category 3.

GHS Label elements, including precautionary statements



Signal word: Danger.

Hazard statement(s): May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Harmful to aquatic life.

Precautionary statement(s):

Prevention: Keep only in original container. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not touch eyes. Do not



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: Oct. 10. 2022

eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection/ hearing protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get emergency medical help immediately. IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. Wash contaminated clothing before reuse. Get emergency medical help immediately. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately. IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get emergency medical help immediately. Specific treatment (see first aid instructions on the Safety Data Sheet). Absorb spillage to prevent material damage.

Storage: Store in corrosive resistant/container with a resistant inner liner. Store locked up.

Disposal: Dispose of contents/container in accordance with national regulations.

Other hazards which do not result in classification: /

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration
Potassium hydroxide	1310-58-3	90.3%

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. Keep respiratory tract unobstructed. If difficulty in breathing, give oxygen. If the patient ingests or inhales this substance, do not perform mouth-to-mouth artificial respiration. If not breathing, immediately perform cardiopulmonary resuscitation. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Wash contaminated clothing before reuse. Consult a physician.

In case of eye contact: Immediately lift the eyelids and rinse thoroughly with plenty of running water or saline for at least 15 minutes. Consult a physician.

Version: 1.0 Issue date: Oct. 10. 2022

If swallowed: For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully.

Most important symptoms and effects, both acute and delayed: /

Indication of immediate medical attention and special treatment needed: /

SECTION 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Water spray or fog. Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide.

Special hazards arising from the chemical: Non-combustible. Not considered a significant fire risk, however containers may burn.

Special protective actions for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Clean up all spills immediately. Avoid breathing dust and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up: Collect recoverable product into labeled containers for recycling. Neutralize/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labeled drums for disposal. Wash area and prevent runoff into drains. After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling: Protect against all personal contact, including inhalation of dust. Wear protective clothing when at risk of contact. Use this substance in well-ventilated areas.

Conditions for safe storage, including any incompatibilities: Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible



Version: 1.0 Issue date: Oct. 10. 2022

materials and foodstuff containers. Avoid contact with strong acids and metals. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Appropriate engineering controls: Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator maybe required in special circumstances. Correct fit is essential to ensure adequate protection.

Personal protective equipment:

Eye/face protection: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Hand protection: Wear chemical protective gloves.

Skin and body protection:

Wear chemical protective gloves, eg. PVC. Wear safety footwear or safety gumboots, eg. Rubber. Impervious clothing, Flame retardant antistatic protective 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: Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Flake

Colour: White

odor: N/A

Melting point/freezing point: N/A

Boiling point or initial boiling and boiling range: N/A

Flammability: N/A

Lower and upper explosion limit/flammable limit: N/A

Flash point: N/A

Auto-ignition temperature: N/A

Decomposition temperature: N/A



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: Oct. 10. 2022

Ph: 13.5(0.1 mol/L)

Kinematic viscosity: N/A

Solubility: Soluble in water

Partition coefficient n-octanol/water (log value): N/A

Vapor pressure: N/A

Density and/or relative density: 2.04

Relative vapor density: N/A

Particle characteristics: N/A

SECTION 10 STABILITY AND REACTIVITY

Reactivity: Contact with strong acids liberates heat.

Chemical stability: Stable at room temperature under normal pressure.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: /

Incompatible materials: Acids, metals.

Hazardous decomposition products: /

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity: Harmful if swallowed. Potassium hydroxide: LD50: 273mg/kg (oral, rat).

Skin corrosion/irritation: Causes severe skin burns.

Serious Eye Damage/Eye irritation: Causes serious eye damage.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

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.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity: Harmful to aquatic life.

Persistence and degradability: Water/Soil: LOW.



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: Oct. 10. 2022

Bioaccumulative potential: LOW.

Mobility in soil: HIGH.

Other adverse effects: No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal methods: In accordance with the local environmental protection department under the disposal of the product containers, waste packaging and residues. Consult a professional waste disposal company proposal. Decontaminate empty containers. Waste shipments must be securely packed, properly labeled, and documented.

SECTION 14 TRANSPORT INFORMATION

UN number: UN 1813.

UN proper shipping name: POTASSIUM HYDROXIDE, SOLID.

Transport hazard class(es): 8.

Packaging group: II.

Marine Pollutant (Yes / No): No.

Special precautions for user: Please select appropriate transportation means and corresponding transportation and storage conditions according to the nature of chemicals. The means of transport shall be equipped with fire- fighting materials of corresponding varieties and quantities and emergency treatment equipment for leakage.

SECTION 15 REGULATORY INFORMATION

Regulations : All users must comply with the regulations or standards about safety production, use, storage, transportation, loading and unloading of hazardous chemical in our country.

Regulations on the Safety Management of Dangerous Chemicals (Revised version of 2013)

Regulations on the Safe Use of Chemicals in the Workplace ([1996] Labor Department issued No. 423)

General rule for classification and hazard communication of chemicals (GB 13690-2009)

List of dangerous goods (GB 12268-2012)

Classification and code of dangerous goods (GB 6944-2012)

The principle of classification of transport packaging groups of dangerous goods (GB/T15098-2008)

Occupational exposure limits for hazardous agents in the workplace Chemically hazardous agents (GBZ 2.1 - 2019)



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: Oct. 10. 2022

Safety data sheet for chemical products-Content and order of sections (GB/T 16483-2008)

Rules for classification and labelling of chemicals - Part 17: Corrosive to metals (GB 30000. 17 -2013)

Rules for classification and labelling of chemicals - Part 18: Acute toxicity (GB 30000. 18 -2013)

Rules for classification and labelling of chemicals - Part 19: Skin corrosion / irritation (GB 30000. 19-2013)

Rules for classification and labelling of chemicals - Part 20: Serious eye damage/eye irritation (GB 30000.20- 2013)

Rules for classification and labelling of chemicals - Part 28: Hazardous to the aquatic environment (GB 30000.28 - 2013)

SECTION 16 OTHER INFORMATION

References: Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (Ninth revised edition)

Recommendations on the Transport of Dangerous Goods, Model Regulations (TDG)

(Twenty-second revised edition)

Date: Feb. 21, 2023

Other information: The SDS is prepared based on the existing knowledge of our center. Although it describes some hazards, we do not guarantee that these are the only hazards. The user shall, according to the actual situation and referring to the above data, formulate the safety operation procedures by himself, and abide by the current laws and regulations. The relevant data in this safety technical manual is only for safety work reference and does not represent the product specification.

-- END OF MSDS --