



天津嘉恒远国际贸易有限公司

Tianjin Jiahengyuan International Trade Co., Limited

No.1023, 10th Floor, Building B, HOPSON Junjing Square, Hangyun 1st road, TEDA, Tianjin, China.

Website: <http://www.jiahengyuanchem.com>

=====

Sodium Hydroxide Solutions 40 to 50% Material Safety Data Sheet

➤ Section 1 - Chemical Product

MSDS Name: Sodium Hydroxide Solutions 40 to 50% Material Safety Data Sheet

Synonym: Caustic soda; Lye

➤ Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
1310-73-2	Sodium Hydroxide	40-50	215-185-5

Hazard Symbols: C

Risk Phrases: 35

➤ Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Causes severe burns. Corrosive.

Potential Health Effects

Eye:

Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Skin:

Causes skin burns. May cause deep, penetrating ulcers of the skin.

May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Ingestion:

May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract.

Causes severe pain, nausea, vomiting, diarrhea, and shock.

May cause systemic effects.

Inhalation:

Irritation may lead to chemical pneumonitis and pulmonary edema.

Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. May cause systemic effects.

Chronic:

Prolonged or repeated skin contact may cause dermatitis. Effects may be delayed.



天津嘉恒远国际贸易有限公司

Tianjin Jiahengyuan International Trade Co., Limited

No.1023, 10th Floor, Building B, HOPSON Junjing Square, Hangyun 1st road, TEDA, Tianjin, China.

Website: <http://www.jiahengyuanchem.com>

➤ Section 4 - FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Get medical aid immediately. Wash clothing before reuse.

Ingestion:

If swallowed, do NOT induce vomiting. Get medical aid immediately.

If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

➤ Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Use water with caution and in flooding amounts. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Extinguishing Media:

Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

Cool containers with flooding quantities of water until well after fire is out.

➤ Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:



天津嘉恒远国际贸易有限公司

Tianjin Jiahengyuan International Trade Co., Limited

No.1023, 10th Floor, Building B, HOPSON Junjing Square, Hangyun 1st road, TEDA, Tianjin, China.

Website: <http://www.jiahengyuanchem.com>

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

➤ Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing.

Keep container tightly closed. Discard contaminated shoes.

Use only with adequate ventilation. Do not breathe spray or mist.

Storage:

Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong acids. Keep away from metals. Keep away from flammable liquids. Keep away from organic halogens.

➤ Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits CAS# 1310-73-2: United Kingdom, WEL - STEL: 2 mg/m³

STEL United States OSHA: 2 mg/m³ TWA Belgium - TWA: 2 mg/m³ VLE

France - VME: 2 mg/m³ VME Germany: 2 mg/m³ TWA (inhalable fraction)

Japan: 2 mg/m³ Ceiling Malaysia: 2 mg/m³ Ceiling Spain: 2 mg/m³

VLA-EC CAS# 7732-18-5: Personal Protective Equipment Eyes: Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

➤ Section 9 - PHYSICAL AND CHEMICAL PROPERTIES



天津嘉恒远国际贸易有限公司

Tianjin Jiahengyuan International Trade Co., Limited

No.1023, 10th Floor, Building B, HOPSON Junjing Square, Hangyun 1st road, TEDA, Tianjin, China.

Website: <http://www.jiahengyuanchem.com>

Physical State: Liquid
Color: Clear
Odor: none reported
pH: Alkaline
Vapor Pressure: 14 mm Hg
Viscosity: >1 (ether=1)
Boiling Point: > 100 deg C
Freezing/Melting Point: > 0 deg C
Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: Not available.
Solubility in water: Soluble.
Specific Gravity/Density: 1.4-1.54
Molecular Formula: Solution
Molecular Weight: 0

➤ **Section 10 - STABILITY AND REACTIVITY**

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

Extreme temperatures.

Incompatibilities with Other Materials:

Metals, acids, aluminum, tin, zinc, flammable liquids, nitromethane, nitro compounds, halogenated organics (e.g. dibromoethane, hexachlorobenzene, methyl chloride, trichloroethylene).

Hazardous Decomposition Products:

Toxic fumes of sodium oxide.

Hazardous Polymerization: Will not occur.

➤ **Section 11 - TOXICOLOGICAL INFORMATION**

RTECS#:

CAS# 1310-73-2: WB4900000 CAS# 7732-18-5: ZC0110000 LD50/LC50:

CAS# 1310-73-2: Draize test, rabbit, eye: 400 ug Mild; Draize test, rabbit, eye: 1% Severe; Draize test, rabbit, eye: 50 ug/24H Severe; Draize test, rabbit, eye: 1 mg/24H Severe; Draize test, rabbit, skin: 500 mg/24H Severe.

CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg.



天津嘉恒远国际贸易有限公司

Tianjin Jiahengyuan International Trade Co., Limited

No.1023, 10th Floor, Building B, HOPSON Junjing Square, Hangyun 1st road, TEDA, Tianjin, China.

Website: <http://www.jiahengyuanchem.com>

Carcinogenicity:

Sodium hydroxide - Not listed by ACGIH, IARC, or NTP.

Water - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

➤ Section 12 - ECOLOGICAL INFORMATION

➤ Section 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

➤ Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: SODIUM HYDROXIDE, SOLUTION

Hazard Class: 8

UN Number: 1824

Packing Group: II

IMO

Shipping Name: SODIUM HYDROXIDE, SOLUTION

Hazard Class: 8

UN Number: 1824

Packing Group: II

RID/ADR

Shipping Name: SODIUM HYDROXIDE, SOLUTION

Hazard Class: 8

UN Number: 1824

Packing group:

USA RQ: CAS# 1310-73-2: 1000 lb final RQ; 454 kg final RQ

➤ Section 15 - REGULATORY INFORMATION



天津嘉恒远国际贸易有限公司

Tianjin Jiahengyuan International Trade Co., Limited

No.1023, 10th Floor, Building B, HOPSON Junjing Square, Hangyun 1st road, TEDA, Tianjin, China.

Website: <http://www.jiahengyuanchem.com>

=====

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:

R 35 Causes severe burns.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately

with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face
protection.

S 45 In case of accident or if you feel unwell, seek
medical advice immediately (show the label where
possible).

WGK (Water Danger/Protection)

CAS# 1310-73-2: 1

CAS# 7732-18-5: No information available.

Canada

CAS# 1310-73-2 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 1310-73-2 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

Disclaimer:

TIANJIN JIAHENGYUAN INTERNATIONAL TRADE CO., LIMITED provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Prepared by: TIANJIN JIAHENGYUAN INTERNATIONAL TRADE CO., LIMITED