



SAFETY DATA SHEET

SODIUM HYDROXIDE

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME: SODIUM HYDROXIDE
PART No.: RM246
SUPPLIER: J M Loveridge plc
Southbrook Road, Southampton
Hampshire
SO15 1BH
Tel: 023 8022 2008
Fax: 023 8022 2117

2. COMPOSITION/INFORMATION ON INGREDIENTS:

EU INDEX No.: 011-002-00-6
EEC (EINECS) No. 215-185-5
CAS No.: 1310-73-2

3. HAZARDS IDENTIFICATION:

Causes severe burns.

4. FIRST AID MEASURES:

GENERAL: IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION

INHALATION: Move affected person to fresh air. If recovery not rapid, seek medical attention.

INGESTION: Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Keep patient at rest and obtain medical attention.

SKIN: Remove contaminated clothing. Wash affected area with plenty of soap and water. If irritation persists, seek medical attention. Launder clothing before re-use.

EYES: Keeping eye open, immediately irrigate with water or eye-wash for 15 minutes. Obtain medical attention.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA:	Use extinguishing media suitable against surrounding fire or the cause of fire.
SPECIAL FIRE FIGHTING PROCEDURES:	Take measures to retain water used for extinguishing. Do not release contaminated water into drains, soil and surface water. Dispose of contaminated water and soil according to local regulations.
UNUSUAL FIRE & EXPLOSION HAZARDS:	Contact with some organic chemicals may produce violent or explosive reactions. Reaction with water will generate heat - this may be sufficient to ignite combustible materials. Contact with some metals will liberate hydrogen gas - explosion risk!
PROTECTIVE MEASURES IN FIRE:	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL:	Avoid direct contact with skin, eyes and clothing. Wear appropriate protective clothing.
PRECAUTIONS TO PROTECT ENVIRONMENT:	Prevent material from entering drains or water courses. Advise the Environment Agency or relevant local authority if contamination of soil or water systems occurs.
SPILL CLEANUP METHODS:	Take-up spillage with absorbent, inert material and place in a suitable and closable labelled container for recovery or disposal. Wash the area clean with water and detergent, observing environmental requirements.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS:	HANDLING - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Avoid contact with skin or eyes. Exercise care when dissolving the product due to strong exothermic reaction.
STORAGE PRECAUTIONS:	Store in a cool, dry, well ventilated place, in securely closed original container. Keep away from aluminium, zinc, lead, tin and acids.
STORAGE CRITERIA:	Corrosive storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT NAME:	CAS No.:	STD	LT EXP 8 Hrs	ST EXP 15 Min
SODIUM HYDROXIDE	1310-73-2	OES		2 mg/m ³

VENTILATION:	Work in a fume cupboard or use local exhaust ventilation. Respiratory protection required in insufficiently ventilated working areas.
PROTECTIVE GLOVES:	Use impervious gloves made of butyl rubber or PVC.
EYE PROTECTION:	Approved chemical safety goggles or face protection.
OTHER PROTECTION:	Wear protective clothing and closed footwear. Wear suitable personal protective equipment appropriate to the task. Wear apron and/or other suitable impervious clothing.
HYGIENIC WORK PRACTICES:	SKIN PROTECTION - apply barrier cream to hands and exposed skin. Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Colourless or white pellets or masses.		
BOILING POINT (°C, interval):	1390	Pressure:	
MELT/FREEZ. POINT (°C, interval):	mp. 318°C		
DENSITY/SPECIFIC GRAVITY (g/ml):	~ 2.13	Temperature (°C):	20
BULK DENSITY:	1.175 kg/l		
pH-VALUE, DILUTED SOLUTION:	14	Concentration % M:	
SOLUBILITY DESCRIPTION:	Very soluble in water. Deliquescent.		

10. STABILITY AND REACTIVITY:

STABILITY:	Stable under normal conditions of use. Avoid long storage and large quantities. On storage absorbs carbon dioxide from air. Product dissolves with evolution of heat.
CONDITIONS TO AVOID:	Avoid excessive moisture. Material is hygroscopic.
MATERIALS TO AVOID:	Reacts violently with water, acids, halogenated (chlorinated) hydrocarbons. Avoid: oxidising agents, anhydrides; Reaction with light metals (aluminium, etc.) will evolve hydrogen - explosion/fire risk! Can cause zinc dust to ignite.

11. TOXICOLOGICAL INFORMATION:

TOXIC DOSE - LD 50:	500 mg/kg (oral-rbt)
TOXICOLOGICAL INFORMATION:	Lethal dose - human (adult): 5g.
HEALTH HAZARDS, GENERAL:	Irritating to eyes or if inhaled as dust. Corrosive to eyes, skin and mucous membranes.
INHALATION:	Irritating to mucous membranes. Irritating to the respiratory system.
INGESTION:	May cause burns to mucous membranes, throat and stomach. Risk of perforation in the oesophagus and stomach.
SKIN:	Causes severe burns. Skin damage or ulceration is slow to heal.
EYES:	Corrosive to eyes. May cause severe corneal damage or blindness.

12. ECOLOGICAL INFORMATION:

ECOLOGICAL INFORMATION:	Prevent contamination of soil, drains or surface water, use appropriate containment method to avoid environmental contamination. Harmful effect due to pH shift. Caustic even in dilute form. Concentrations greater than 10ppm or pH value equal to or greater than 10.5, especially in fresh water systems can be fatal to fish and other aquatic organisms. Can cause damage to aquatic plants and other vegetation. Concentrations sufficient to render effluent alkaline may damage effluent treatment organisms.
DEGRADABILITY:	Degrades readily by reaction with atmospheric carbon dioxide.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS: This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.

WASTE CLASS: WASTE CODE:0705** HAZARDOUS PROPERTY: H8 H14

14. TRANSPORT INFORMATION:

UN No. ROAD: 1823

UK ROAD PACK GR.: II

ADR CLASS No.: 8

ADR CLASS: Class 8: Corrosive substances.

ADR ITEM No.: 41°(b)

HAZARD No. (ADR): 80 Corrosive or slightly corrosive substance.

ADR MARGINAL: 2801

ADR LABEL No.: 8

HAZCHEM CODE: 2X

PROPER SHIPPING NAME I: SODIUM HYDROXIDE, SOLID

UN No. SEA : UN 1823

IMDG CLASS: 8

IMDG PAGE No.: 8225 - 1

IMDG PACK GR.: II

UN No., AIR: UN-ID 1823

ICAO CLASS: 8

AIR PACK GR.: II

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:

RISK PHRASES: R-35 Causes severe burns.

SAFETY PHRASES: S-1/2 Keep locked up and out of the reach of children.
S-37/39 Wear suitable gloves and eye/face protection.
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

UK REGULATORY REFERENCES: Chemicals (Hazard Information & Packaging) Regulations 1993. Classification, Packaging and Labelling Regulations 1984.

16. OTHER INFORMATION:

INFORMATION SOURCES: This product has been classified in accordance with CHIP3 regulations.

REVISION COMMENTS: Edition 01; Revised item(s): all sections.

ISSUED BY: MK

SDS No.: 443

DATE: 12/07/02

DISCLAIMER: The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this Data Sheet is to the best of JMLs knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For any further information, please contact the supplier.