

EPIGRAL LTD., UNIT-Dahej

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Sodium hydroxide, 50 wt% solution in water	19	31/08/2023	1 of 10	

Epigral Ltd. urges the customers receiving this Material Safety Data Sheet (MSDS) to study it carefully to become aware of hazards, if any, of the product involved. In the interest of Safety, you should notify your employee, agent & contractors about the information on this sheet, furnish a copy of each of your customers for the product, and request your customers to inform their employees and customers as well.

SECTION 1: Identification

Product Name Sodium hydroxide, 50 wt% solution in water
CAS-No 1310-73-2
Synonyms Caustic soda
Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.
Details of the supplier of the safety data sheet
Company Epigral Limited
Plot No. CH1.CH2, Industrial Estate
Dahej, Taluka : Vagra
Bharuch-392 130
Gujarat
INDIA

Emergency Telephone Number : 91-9099985862

SECTION 2 : Hazards identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals	Category 1
Skin Corrosion/irritation	Category 1A
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

Label Elements

Signal Word Danger



Hazard Statements

May be corrosive to metals
Causes severe skin burns and eye damage
May cause respiratory irritation

Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area

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Keep only in original container

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Spills

Absorb spillage to prevent material damage

Storage

Store locked up

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

Store in corrosive resistant polypropylene container with a resistant inliner

Store in a dry place

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

SECTION 3: Composition/information on ingredients

Component	CAS NO	Weight %
Sodium hydroxide	1310-73-2	50
Water	7732-18-5	50

SECTION 4: First aid measures

General Advice

Take off contaminated clothing and shoes immediately

Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Inhalation

Remove from exposure, lie down. Move to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.

Ingestion

Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

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Most important symptoms and effects Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Notes to Physician Treat symptomatically

SECTION 5: Fire fighting measures

Suitable Extinguishing Media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable Extinguishing Media No information available

Flash Point No information available

Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical Thermal decomposition can lead to release of irritating gases and vapors. Corrosive Material

Hazardous Combustion Products Sodium oxides

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Health	Flammability	Instability	Physical Hazards
3	0	1	N/A

SECTION 6: Accidental release measures

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Personal Precautions

Avoid contact with the skin and the eyes. Use personal protective equipment. Evacuate personnel to safe areas. Do not touch or walk through spilled material.

Refer to protective measures listed in Sections 7 and 8

Environmental Precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods for Containment and Clean Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Handling Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in well-ventilated areas. Wash thoroughly after handling.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Sodium hydroxide	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³ TWA: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health and Health Immediately Dangerous to Life or Health

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Tightly fitting safety goggles.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

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Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

SECTION 9: Physical and chemical properties

Physical State Liquid
Appearance Clear
Odor Odorless
Odor Threshold No information available
pH > 13.0 Alkaline
Melting Point/Range 12 °C / 53.6 °F
Boiling Point/Range 145 °C / 293 °F
Flash Point Not applicable
Evaporation Rate No information available
Flammability (solid,gas) Not applicable
Flammability or explosive limits
Upper No data available
Lower No data available
Vapor Pressure 14 mmHg
Vapor Density > 1.0
Specific Gravity 1.5
Solubility Soluble in water
Partition coefficient; n-octanol/water No data available
Autoignition Temperature No information available
Decomposition Temperature No information available
Viscosity No information available

SECTION 10: Stability and reactivity

Reactive Hazard Yes
Stability Stable under recommended storage conditions.
Conditions to Avoid Exposure to air. Incompatible products.
Incompatible Materials Acids, Organic materials, Metals, Aluminium, copper,
Hazardous Decomposition Products Sodium oxides
Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions Corrosive to metals.

SECTION 11: Toxicological information

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Acute Toxicity

Product Information No acute toxicity information is available for this product

- Oral LD50** Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
- Dermal LD50** Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
- Vapor LC50** Category 4. ATE = 10 - 20 mg/l. Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide	140 - 340 mg/kg (Rat)	1350 mg/kg (Rabbit)	Not listed
Water	-	Not listed	Not listed

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium hydroxide	1310-73-2	Not listed				
Water	7732-18-5	Not listed				

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

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Symptoms / effects, both acute and delayed

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

Ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. Large amounts will affect pH and harm aquatic organisms. Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium hydroxide	Not listed	LC50: 45.4 mg/L/96h	Not listed	Not listed

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility. Will likely be mobile in the environment due to its water solubility.

SECTION 13: Disposal considerations

Waste Disposal Methods Should not be released into the environment.

SECTION 14: Transport information

DOT

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II

TDG

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II

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IATA

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Subsidiary Hazard Class 8
Packing Group II

IMDG/IMO

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II

SECTION 15: Regulatory information

All of the components in the product are on the following Inventory lists: X = listed International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	PICS	ENC S	AICS	IECS	KECL
Sodium hydroxide	X	X	-	215-185-5	-	X	X	X	X	KE-31487
Water	X	X	-	231-791-2	-	X	-	X	X	KE-35400

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA. S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)

Not applicable

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SARA 313 Not applicable

SARA 311/312 Hazard Categories CWA (Clean Water Act) See section 2 for more information

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Sodium hydroxide	x	1000lb	-	-

Clean Air Act Not applicable
OSHA Occupational Safety and Health Administration Not applicable

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium hydroxide	1000lb	-

California Proposition 65 This product contains the following proposition 65 chemicals
U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium Hydroxide	X	X	X	-	X
Water	-	-	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ) : Y
 DOT Marine Pollutant : N
 DOT Severe Marine Pollutant : N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico – Grade No information available

**SECTION 16: Other information: --
MANUFACTURERS / SUPPLIERS DATA**

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Name of the firm	EPIGRAL LTD.,	Contact Person in Emergency:
Mailing Address	CH1/CH2,GIDC Industrial Estate, Dahej Dist.: Bharuch, Gujarat (INDIA)	UNITE HEAD
Telephone Nos.	Fact.: 91-9909995940	
		Rev No : 04 (31/08/2023)

DISCLAIMER

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