

EPIGRAL LTD., UNIT-Dahej

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Sodium Hydroxide Flake	15	31/08/2023	1 of 9	

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, flake
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 : 91-6359605550

SECTION 2 : Hazards identification

Classification

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

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

Label Elements

Signal Word Danger



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

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

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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

Storage

Store locked up

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

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	>95
Sodium Carbonate	497-19-8	<3.0

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.

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

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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

Auto ignition 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 Carbon monoxide (CO). Carbon dioxide (CO₂). 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. Thermal decomposition can lead to release of irritating gases and vapors.

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

SECTION 6: Accidental release measures

Personal Precautions Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

Environmental Precautions Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

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SECTION 7: Handling and storage

Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

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

Store under an inert atmosphere. Protect from moisture.

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.

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 Solid

Appearance White

Odor Odorless

Odor Threshold No information available

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pH 14 (5 %)

Melting Point/Range 318 °C / 604.4 °F

Boiling Point/Range 1390 °C / 2534 °F @ 760 mmHg

Flash Point Not applicable

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available

Lower No data available

Vapor Pressure 1 mmHg @ 739 °C

Vapor Density Not applicable

Specific Gravity 2.13

Solubility Soluble in water

Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available

Decomposition Temperature No information available

Viscosity Not applicable

Molecular Formula NaOH

Molecular Weight 40

SECTION 10: Stability and reactivity

Reactive Hazard None known, based on information available

Stability Water reactive. Hygroscopic.

Conditions to Avoid Exposure to air. Incompatible products.

Conditions to Avoid Avoid dust formation. Incompatible products. Excess heat. Exposure to moist air or water.

Incompatible Materials Water, Metals, Acids

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO₂), Sodium oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

Product Information

Component Information.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide	LD50 = 325 mg/kg (Rat)	LD50 = 1350 mg/kg (Rabbit)	Not listed
Sodium Carbonate	2800 mg/kg (Rat)	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)

Toxicologically Synergistic Products No information available

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

Irritation Causes severe burns by all exposure routes

Sensitization No information available

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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	Not listed	Not listed	Not listed	Not listed
Sodium Carbonate	497-19-8	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects Mutagenic effects have occurred in experimental animals.

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

Symptoms / effects, both acute and delayed

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

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
Sodium Carbonate	EC50: = 242 mg/L, 120h (Nitzschia)	Lepomis macrochirus: LC50: 300 mg/L/96h Gambusia affinis: LC50: 740 mg/L/96h	-	EC50: = 265 mg/L, 48h (Daphnia magna)

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

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Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT

UN-No UN1823
Proper Shipping Name Sodium hydroxide, solid
Hazard Class 8
Packing Group II

TDG

UN-No UN1823
Proper Shipping Name SODIUM HYDROXIDE, SOLID
Hazard Class 8
Packing Group II

IATA

UN-No UN1823
Proper Shipping Name SODIUM HYDROXIDE, SOLID
Hazard Class 8
Packing Group II

IMDG/IMO

UN-No UN1823
Proper Shipping Name SODIUM HYDROXIDE, SOLID
Hazard Class 8
Packing Group II

SECTION 15: Regulatory information

United States of America Inventory

Component	CAS NO	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Sodium hydroxide	1310-73-2	X	Active	-
Sodium Carbonate	497-19-8	X	Active	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

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

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International Inventories

Component	CAS NO	DSL	NDSL	EINECS	PICCS	ENC S	AIC S	IECS C	KECL
Sodium hydroxide	1310-73-2	X	-	215-185-5	X	X	X	X	KE-31487
Sodium Carbonate	497-19-8	X	-	207-838-8	X	-	X	X	KE-31380

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

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	1000 lb	-

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium hydroxide	X	X	-	X	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.

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Other International Regulations

Mexico - Grade No information available

SECTION 16: Other information

MANUFACTURERS / SUPPLIERS DATA

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)

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