

Material Safety Data Sheet (MSDS) - Sodium Hydroxide, 50% w/w



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1-Material Specifications

Material Name	Sodium Hydroxide, 50% w/w
Chemical name	Sodium Hydroxide, 50% w/w- NaOH
Common Name/ Chemical Family	caustic soda 50% W/W / soda lye, 50%, aqueous solution / white caustic, 50%, aqueous solution
Use of the substance/mixture	Industrial, Manufacturing or Laboratory use
CAS NO.	1310-73-2
EC NO.	215-185-5
NFPA Rating	0.1 and 3

2- Physical and Chemical Properties

	Chemical name	Structural Formula	Molar Mass	Melting Point	Boiling Point	Density
1	Sodium Hydroxide, 50% w/w	NaOH	40 g/mo	12 °C	143 °C	1.50 g/mL

	Purity	pH	Solubility in Water	Appearance /Odor	Vapor Density (Air=1)	Vapor Pressure (mmHg)	VOC%
2	Min: 48%	14	Completely	Odorless	1.33	<18 mmHg at - 20 °C	Not applicable (inorganic)

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3- Hazardous Ingredients

Chemical Name	Cas Number	TLV	PEL
Sodium Hydroxide, 50% w/w	1310-73-2	2 mg/m ³	2 mg/m ³

4- Hazards of Contact

Damage organs	Kidney, Liver, Eyes, Skin, Mucous membranes, Respiratory system, Cardiovascular system
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	Eye	Causes severe eye burns
	Skin	May be harmful if absorbed through skin. Causes skin burns.
	Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
	Ingestion	May be harmful if swallowed.
	Chronic effects	Chronic exposure to dusts or mists of sodium hydroxide may lead to ulceration of the nasal passages. Chronic skin exposures can lead to dermatitis. Ingestion may lead to perforation of the gastrointestinal tract or stricture formation.

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5- Health and First Aids

A large, 3D-style red cross icon with a white drop shadow, centered in the left column of the table.	measures after eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.
	measures after skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
	Inhalation	Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Call a physician or poison control center immediately.
	Ingestion	Call a physician or poison control center immediately. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
	measures general	Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.


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6- Fire /Fighting Measures

	Flash Point	Not applicable.
	Auto Ignition	Not applicable.
	Extinguishing Media	Adapt extinguishing media to the environment. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
	Flammable Limits	Not Explosive
	Fire Fighting Procedures	Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.
	Unusual Fire and Explosion Hazards	Product is highly caustic. Wear appropriate protective gear if spilled during firefighting. Contact with metals may evolve flammable hydrogen gas.


7- Stability and Reactivity

	Stability	Material is stable under normal conditions.
	Conditions to Avoid	Avoid contact with oxidizing agents. Reacts violently with strong acids.
	Incompatible Materials	Oxidizing agents. Acids. Maleic Anhydride Halogens. Nitromethane. Contact with metals may evolve flammable hydrogen gas.
	Hazardous Decomposition Products	Sodium oxides Thermal decomposition generates : Corrosive vapors.
	Hazardous reactions	Not established.


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8- Storage and Handling

	Precautions to be taken	Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle and open the container with care. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.
	Other Precautions	Follow label instructions and Precautions

9- personal Protective Equipments

	Clothing	Wear appropriate protective clothing to prevent skin exposure.
	Eye protection	Wear chemical splash goggles and face shield.
	Skin and body protection	Wear butyl rubber gloves, apron, and/or clothing.

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10- Accidental Release Measures

General Information: Use proper personal protective equipment.

Spills/Leaks: Neutralize spill. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

11- Disposal Considerations

Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.


12- Transportation

Proper Shipping Name	Hazard Class	UN Number	Packaging Group
SODIUM HYDROXIDE	8	UN1824	II

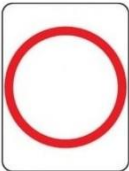
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13- Toxicology

	Carcinogenicity	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, NTP, IRAC and ACGIH.
	Mutagenicity	Not classified
	Reproductive	Not classified
	Sensitization	Not classified

14- Regulatory

	TSCA Inventory Status	All ingredients are listed on the TSCA inventory
	DSCL (EEC)	All ingredients are listed on the DSCL inventory.
	SARA 302	Not Listed
	SARA 311	Acute Health Hazard
	SARA 312	Acute Health Hazard
	SARA 313	Not Listed
	WHMIS Canada	Class E: Corrosive material.

15- Other Information

The information contained on this Material Safety Data Sheet is considered accurate as of the date of publication. It is not necessarily all inclusive nor fully adequate in every circumstance. The suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements. No warranty, express or implied, of merchantability, fitness, accuracy of data, or the results to be obtained from the use thereof is made. The vendor assumes no responsibility for injury or damages resulting from the inappropriate use of this product.