SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

Issuing Date: 23-Sep-2026 **Revision Date:** 23-Sep-2026 **Version:** 3

1. Identification

Product identifier
Product Name Sodium Hydroxide 50% FG

Other means of identification
Product Code 913692
UN/ID No UN1824
Synonyms Caustic soda, lye, soda lye, sodium hydrate.

Recommended use of the chemical and restrictions on use
Recommended Use Industrial, Manufacturing or Laboratory use.
Restrictions on Use None known

Details of the supplier of the safety data sheet
Manufacturer Address
Hawkins, Inc.
2381 Rosegate
Roseville, MN 55113
(612) 331-6910

E-mail SDS@hawkinsinc.com for SDS questions. All others contact customer.service@hawkinsinc.com
Emergency Telephone: CHEMTREC: 1-800-424-9300 (US) / +1 703-741-5970 (International)

2. Hazard(s) identification

Classification of the substance or mixture

Corrosive to metals	Category 1
Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Hazards not otherwise classified (HNOC)
Not applicable

Label elements



Danger

Hazard statements
May be corrosive to metals

Harmful if swallowed.
Causes severe skin burns and eye damage.

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe dust, fume, gas, mist, vapors and spray.
Keep only in original packaging.
Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor.
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
Rinse mouth.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Absorb spillage to prevent material damage.

Precautionary Statements - Storage
Store locked up.
Store in corrosion resistant container with a resistant inner liner.

Precautionary Statements - Disposal
Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

Conditions	Chemical hazard classification	Category
Exposure to metals may lead to the evolution of hydrogen gas	Flammable gases	Category 1
Exposure to acid, acid anhydrides, or water	Hazards not otherwise classified (HNOC)	Rapid and exothermic reaction
Releases carbon monoxide (CO) when reacted with aqueous solutions of reducing sugars (excluding sucrose) and heated above 84◦C	Flammable gases Acute toxicity - Inhalation (Gases) Reproductive toxicity Specific target organ toxicity (repeated exposure)	Category 1B Category 3 Category 1A Category 1 (Heart)

Other Information
Harmful to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance
Not applicable.

Mixture
Synonyms Caustic soda, lye, soda lye, sodium hydrate.

Chemical name	CAS No.	Weight-%
Sodium Hydroxide	1310-73-2	49.5-51.5
Water	7732-18-5	Balance

Any concentration shown as a range is due to batch variation.

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Do not use soap or attempt to neutralize the caustic soda with chemicals. May not cause immediate pain when in contact with skin but it does cause immediate damage. Discard contaminated leather goods. Get immediate medical attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical attention.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Redness. May cause blindness. Coughing and/ or wheezing. May cause redness and tearing of the eyes.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. Fire-fighting measures

Suitable Extinguishing Media Adding water to caustic solution generates large amounts of heat. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Mixing with water, acid, or incompatibles may cause splattering and release of heat. Heat released may be sufficient to ignite combustible materials. Reacts with ammonium salts to make flammable ammonia. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Contact with metals may evolve flammable hydrogen gas. Do not allow run-off from fire-fighting to enter drains or water courses. Runoff may pollute waterways.

Hazardous combustion products Sodium oxides.

Explosion Data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

precautions for fire-fighters Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways.

Methods for cleaning up Neutralize with weak acid (if necessary). Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Mixing concentrated solutions with water, acid, or incompatibles may cause splattering and release of heat. Heat released may be sufficient to ignite combustible materials. Lethal concentrations of carbon monoxide gas may form upon contact with reducing sugars, food, and beverage products in enclosed spaces. Reacts with ammonium salts to make flammable ammonia. Contact with most metals may produce flammable hydrogen gas. Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. When diluting, always add the product to water. Never add water to the product.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing must not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep at temperatures between 65 and 95 ◦F. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from other materials.

Incompatible materials Reducing sugars. Oxidizing agent. Acids. Bases. Water. Organic material. Metals. (Aluminum, magnesium, zinc, copper, lead, tin and their alloys).

Packaging materials Steel, nickel, nickel alloys, polyethylene, PVC and CPVC.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m³	TWA: 2 mg/m³ (vacated) Ceiling: 2 mg/m³	Ceiling: 2 mg/m³ IDLH: 10 mg/m³

Note See section 16 for terms and abbreviations.

Other information on limit values Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Biological occupational exposure limits This product, as supplied, contains materials that do not have reportable biological exposure limits or are not subject to the reporting requirements of the local jurisdiction.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Face protection shield. Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Chemical resistant apron.

Respiratory protection Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid
Appearance: Clear
Color: Colorless
Odor: Odorless

Property	Values	Remarks • Method
Melting Point/Freezing Point:	13.333 °C / 56 °F	
Boiling point (or initial boiling point or boiling range)	No data available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air:		
Upper Flammability Limit:	No data available	
Lower Flammability Limit:	No data available	
Flash Point:	No data available	
Autoignition Temperature:	No data available	
Decomposition temperature:	No data available	
SADT (°C)	No data available	
pH	No data available	
pH (as aqueous solution)	No data available	
Kinematic Viscosity:	No data available	
Dynamic Viscosity:	No data available	
Solubility	No data available	
Water solubility	No data available	
Partition coefficient n-octanol/water (log value)	No data available	

Vapor pressure (includes evaporation rate)	No data available
Evaporation Rate (BuAc=1):	No data available
Density and/or relative density	1.535
Bulk Density:	No data available
Liquid Density	No data available
Vapor density (Air =1)	No data available
Particle characteristics	
Particle Size	No data available
Particle Size Distribution	No data available

10. Stability and reactivity

Reactivity Contact with metals may evolve flammable hydrogen gas. Concentrated solutions react violently with water, generating considerable heat.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions Mixing with water, acid, or incompatibles may cause splattering and release of heat. Heat released may be sufficient to ignite combustible materials. Contact with most metals will generate flammable hydrogen gas. Reacts with ammonium salts to make ammonia, which is a fire hazard.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to Avoid: Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.

Incompatible materials Reducing sugars. Oxidizing agent. Acids. Bases. Water. Organic material. Metals. (Aluminum, magnesium, zinc, copper, lead, tin and their alloys).

Hazardous decomposition products Sodium oxides.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May result in permanent damage including blindness.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Burning sensation. Redness. May cause blindness. Coughing and/ or wheezing. May cause redness and tearing of the eyes.

Acute toxicity Harmful if swallowed

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	631.10 mg/kg
ATEmix (dermal)	2,621.40 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hydroxide 1310-73-2	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Water 7732-18-5	> 90 mL/kg (Rat)	-	-

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage. Causes burns.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, ACGIH or NTP.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other Adverse Effects: No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Sodium Hydroxide (1310-73-2)

Species	Ceriodaphnia dubia
Endpoint type	EC50
Effective dose	40.4 mg/L
Exposure time	48 h

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Hydroxide 1310-73-2	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-	-

Persistence and Degradability: No information available.

Bioaccumulative potential There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

DOT

UN/ID No UN1824
Proper shipping name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II
Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

15. Regulatory information

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Complies

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Sodium Hydroxide	1310-73-2	Present	Active
Water	7732-18-5	Present	Active

DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies

PICCS	Complies
AICS	Complies
TCSI	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Hydroxide - 1310-73-2	1000 lb	-	-	X

CAA (Clean Air Act)
This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

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).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	SARA Extremely Hazardous Substances TPQ
Sodium Hydroxide - 1310-73-2	1000 lb / 454 kg (final RQ)	-	-

OSHA - Process Safety Management - Highly Hazardous Chemicals
This product does not contain any substances regulated under Process Safety Management (29 CFR 1910.119).

US State Regulations

California Proposition 65
This product is not known to contain any Proposition 65 chemicals at or above detection limits

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable.

16. Other information

NSF Certification



Maximum Use (mg/L unless otherwise indicated): 100

NFPA **Health hazards** 3 **Flammability** 0 **Instability** 1 **Special hazards** -

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute Toxicity Estimate
Ceiling	Maximum limit value
DOT	Department of Transportation (United States)
ECEL	Existing Chemical Exposure Limit
EPA	U.S. Environmental Protection Agency
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (United States)
OEL	Occupational exposure limits
OSHA	Occupational Safety and Health Administration of the US Department of Labor
PPE	Personal protective equipment
SADT	Self-Accelerating Decomposition Temperature
STEL	Short Term Exposure Limit
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
VOC	Volatile organic compounds

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Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet