

# SAFETY DATA SHEET

Version 3

## 1. Identification of the Substance / Preparation and of the Company / Undertaking

Product Name Sodium Hydroxide 30% Diaphragm **Product Code** 13600 **UN/ID No** UN1824 **Recommended Use** Industrial, Manufacturing or Laboratory use. **Restrictions on Use** None known Manufacturer Hawkins, Inc., 2381 Rosegate, Roseville, MN 55113 (612-331-6910) **Emergency Telephone:** CHEMTREC (US): 1-800-424-9300

#### 2. Hazards Identification

## **GHS** - Classification

Category 4
Category 1 Sub-category A
Category 1
Category 1

## Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements



## Signal Word:

Danger

#### Hazard Statements: · Harmful if swallowed

- · Causes severe skin burns and eye damage
- · May be corrosive to metals

## **Precautionary Statements:**

- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product
- · Do not breathe dusts or mists
- Wear protective gloves/protective clothing/eye protection/face protection
- Keep only in original container
- Immediately call a POISON CENTER or doctor/physician
- 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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- Do NOT induce vomiting

- Absorb spillage to prevent material damage
- Store locked up
- P406 Store in corrosion resistant container with a resistant inner liner
- · Dispose of contents/ container to an approved waste disposal plant

## 3. Composition / Information on Ingredients

Chemical name	CAS No.	Weight-%
Sodium Hydroxide	1310-73-2	29.1-30.9
Water	7732-18-5	Balance

Any concentration shown as a range is due to batch variation or the exact percentage has been withheld as a trade secret.

#### 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. Get immediate medical advice/attention.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 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 advice/attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/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 effe	
Symptoms	Burning. Coughing and/ or wheezing. May cause blindness. Redness.
	al 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 Large Fire Unsuitable extinguishing media Specific hazards arising from the chemical	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient. Do not scatter spilled material with high pressure water streams. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
Explosion Data Sensitivity to mechanical impac Sensitivity to static discharge Special protective equipment for fire-fighters	t None. None. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental Release Measu	res			
o. Accidental Nelease Measu				
Personal precautions, protective Personal precautions	Avoid contact with skin, ey protective equipment as re areas. Keep people away	<b>quipment and emergency procedures</b> 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 contain Methods for containment		spillage if safe to do so		
Methods for cleaning up	Dike far ahead of liquid sp up and transfer to properly	Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. 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	skin, eyes or clothing. In c equipment. Handle produc ventilation. Do not eat, drir clothing and wash before i	Handle in accordance with good industrial hygiene and safety practice. 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.		
Conditions for safe storage, incl	uding any incompatibilities			
Storage Conditions		Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other		
Incompatible materials		s. Metals. Water. Organic materia	I. Reducing sugars.	
8. Exposure Controls / Perso	nal Protection			
<u>Control parameters</u> Exposure Limits	Immeters   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			
Chemical name	limits from the sources list ACGIH TLV	OSHA PEL	NIOSH IDLH	
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>	
Exposure Guidelines	Vacated limits revoked by (11th Cir., 1992).	the Court of Appeals decision in A	AFL-CIO v. OSHA, 965 F.2d 962	
Appropriate engineering control	<u>s</u>			
Engineering controls	Showers Eyewash stations Ventilation systems.			
Individual protection measures, such as personal protective equipment				
Eye/face protection Hand protection		Face protection shield. Tight sealing safety goggles. Wear suitable gloves. Impervious gloves.		
Skin and body protection Respiratory protection	No protective equipment is exceeded or irritation is ex	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.		
Environmental exposure control General hygiene considerations	Wear suitable gloves and product. Regular cleaning contact with skin, eyes or	Do not allow into any sewer, on the ground or into any body of water. 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 should not be allowed out		

9. Physical and Chemical Properties				
9.1. Information on basic physical and chemical properties				
Physical State:	Liquid		<b>a</b>	
Appearance:	Clear	Odor:	Odorless	
Color:	Colorless	Odor Threshold:	No information available	
Property	Values	Remarks • Method		
pH:		No information available		
Salt Out Point:		No information available		
Melting Point/Freezing Point:	0 °C / 32 °F			
Boiling Point/Boiling Range:		No information available		
Flash Point:		No information available		
Evaporation Rate (BuAc=1):		No information available No information available		
Flammability (solid, gas) Flammability Limits in Air:		No information available		
-				
Upper Flammability Limit:		Lower Flammability Limit:		
Vapor Pressure (mm Hg):		No information available		
Vapor density (Air =1)		No information available		
Specific Gravity (H <sub>2</sub> O=1):	1.328			
Specific Gravity (2nd value):				
Water Solubility:	Completely miscible			
Solubility(ies):		No information available		
Partition Coefficient		No information available		
(n-octanol/water)		No information available		
Autoignition Temperature: Decomposition Temperature:		No information available		
Kinematic Viscosity:		No information available		
Dynamic Viscosity:		No information available		
Oxidizing Properties:	No information available			
Explosive Properties:	May cause fire and explosions when	in contact with incompatible	e materials	
9.2. Other information	No information available			
Softening Point:	40.00			
Molecular Weight: VOC Content(%):	No information available			
Liquid Density	No information available			
Bulk density	No information available			
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10. Stability and Reactivity				
Reactivity	Contact with most metals will genera	te flammable hvdrogen gas	. Contact with water will	
	generate considerable heat.	i i i i i i i i i i i i i i i i i i i		
Chemical stability	Stable under normal conditions.			
Possibility of hazardous reactions	None under normal processing.			
Conditions to avoid	Exposure to air or moisture over prole	onged periods. Extremes of	temperature and direct	
	sunlight.			
Incompatible materials	Strong acids. Strong bases. Metals.			
Hazardous decomposition products	s Thermal decomposition can lead to re			
	with metals and sodium tetrahydrobo	rate liberates hydrogen gas	i.	

of the workplace. Wash hands before breaks and immediately after handling the product.

# 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.

	headache, dizziness, and tightness in the chest, sh increased heart rate. Inh Pulmonary edema can b	(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	components). Corrosive Causes serious eye dam	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.		
Skin contact	Specific test data for the (based on components).	substance or mixture is not availal	ble. Causes severe burns.	
Ingestion	Specific test data for the components). Ingestion of cause severe burning pa blood. Blood pressure mouth. Swelling of the th	(based on components). 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 physic	cal, chemical and toxicologic	al characteristics	-	
Symptoms <u>Numerical measures of toxicit</u> No information available		cause blindness. Coughing and/ or	wheezing.	
Acute Toxicity:				
The following values are calcu ATEmix (oral)	1,051.80 mg/kg	the GHS document		
ATEmix (dermal)	4,368.90 mg/kg			
Unknown Acute toxicity30.9 % of the mixture consists of ingredient(s) of unknown toxicity0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)				
Component Information		-		
Chemical name	Oral LD <sub>50</sub> :	Dermal LD <sub>50</sub> :	LC <sub>50</sub> (Lethal Concentration):	
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	Causes severe burns.	in chort and rong torm expectat	<u> </u>	
Serious eye damage/eye irritat	ion Classification based on c damage to eyes.			
Respiratory or skin sensitization	on No information available.	n No information available.		
Germ cell mutagenicity	No information available.	No information available.		

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

Reproductive toxicity	No information available.
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STOT - sing	le exposure	No information availa	ble.

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STOT - repeated exposure No information available.
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Target Organ Effects:Eyes, Respiratory system, Skin.Other Adverse Effects:No information available.
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## Aspiration hazard

No information available.

# 12. Ecological Information

Ecotoxicity	The enviror	mental impact of this produc	ct has not been fully inves	tigated.
Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Sodium Hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static		-
Persistence and Degradability: No information available.   Bioaccumulation: There is no data for this product.				
Other Adverse Effects:	No informat	ion available.		

## 13. Disposal Considerations

#### Waste treatment methods

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with
products	environmental legislation.
Contaminated packaging	Do not reuse empty containers.
US EPA Waste Number (product as	D002.
supplied)	

# 14. Transport Information

#### DOT

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



# 15. Regulatory Information

#### International Inventories

AICS	Complies
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies

Chemical name	AICS	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS
Sodium Hydroxide	Present	Present ACTIVE	Present	-	Present	-	Present	Present [27689]	Present	Present
Water	Present	Present ACTIVE	Present	-	Present	-	Present	Present [32224]	Present	Present

Inventory Legend

AICS - Australian Inventory of Chemical Substances

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

#### RESTRICTIONS - REACH TITLE VII No information available

## US Federal Regulations

#### **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)

0	Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	SARA Extremely Hazardous Substances TPQ
S	odium Hydroxide	1000 lb	-	-

#### SARA 313

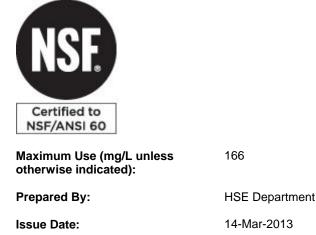
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

#### 16. Other Information

#### **NSF/ANSI 60 Certification**



Revision Note: Reviewed and Re-issued

## 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