



# SAFETY DATA SHEET

Version 3

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

**Product Name:** Sodium Hydroxide 50% Diaphragm  
**UN/ID No** UN1824  
**Synonyms:** Sodium Hydroxide, 50%  
**Recommended Use** Industrial, Manufacturing or Laboratory use.  
**Company Name:**  
 Hawkins, Inc., 2381 Rosegate, Roseville, MN 55113 (612-331-6910)

**Emergency Telephone:**  
 CHEMTREC (US): 1-800-424-9300

## 2. Hazards Identification

### GHS - Classification

|  |                        |
|--|------------------------|
| Acute toxicity - Oral                            | Category 4             |
| Skin corrosion/irritation                        | Category 1 Category 1A |
| Serious eye damage/eye irritation                | Category 1             |
| Specific target organ toxicity (single exposure) | Category 1             |
| Acute aquatic toxicity                           | Category 3             |



**Signal Word:** Danger

**Hazard Statements:**

- Harmful if swallowed
- May be harmful in contact with skin
- Causes severe skin burns and eye damage
- Causes damage to organs
- Harmful to aquatic life

**Physical Hazards**

|                     |            |
|---------------------|------------|
| Corrosive to metals | Category 1 |
|---------------------|------------|

- May be corrosive to metals



**Precautionary Statements:**

## 813655 Sodium Hydroxide 50% Diaphragm

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- Call a POISON CENTER or doctor if you feel unwell
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- 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
- Wear protective gloves/protective clothing/eye protection/face protection
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- IF exposed: Call a POISON CENTER or doctor/physician
- Store locked up
- Avoid release to the environment
- Dispose of contents/ container to an approved waste disposal plant
- Immerse in cool water/wrap in wet bandages
- Absorb spillage to prevent material damage
- Store in corrosive resistant aluminum container with a resistant inliner

### 3. Composition / Information on Ingredients

#### Hazardous

| Chemical Name    | CAS No    | Weight-% | EC No     |
|------------------|-----------|----------|-----------|
| Sodium Hydroxide | 1310-73-2 | 49-51    | 215-185-5 |

#### Non-Hazardous

| Chemical Name   | CAS No    | Weight-% | EC No     |
|-----------------|-----------|----------|-----------|
| Sodium chloride | 7647-14-5 | 0-1.2    | 231-598-3 |
| Water           | 7732-18-5 | Balance  | 231-791-2 |

### 4. First Aid Measures

- General Advice:** Immediate medical attention is required.
- Eye Contact:** Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
- Skin Contact:** Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
- Inhalation:** Move to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.
- 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. Treat symptomatically.
- Self-protection of the First Aider:** Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

### 5. Fire-fighting Measures

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### Flammable Properties:

Not considered to be a fire hazard

### Explosive Properties:

Not considered to be an explosion hazard

### Suitable Extinguishing Media:

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

### Unsuitable Extinguishing Media:

No information available

### Specific Hazards Arising from the Chemical:

The product causes burns of eyes, skin and mucous membranes, Thermal decomposition can lead to release of irritating and toxic gases and vapors, In the event of fire and/or explosion do not breathe fumes

### Protective Equipment and Precautions for Firefighters:

In the event of a fire, wear full protective clothing and MSHA/NIOSH (approved or equivalent) self-contained breathing apparatus with full facepiece operated in the pressure-demand or other positive pressure mode

## 6. Accidental Release Measures

### Personal Precautions:

Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

### Environmental Precautions:

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

### Methods for Cleaning Up:

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

### Other Information:

Not applicable.

## 7. Handling and Storage

### Advice on Safe Handling:

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

### Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

### Incompatible Materials:

Strong acids and bases; Oxidizing agents; Aluminum; Tin; Zinc

## 8. Exposure Controls / Personal Protection

| Chemical Name    |                | ACGIH TLV                               |                              | OSHA PEL   |                          | Ontario TWA              |
|------------------|----------------|---|------------------------------|--|--------------------------|--------------------------|
| Sodium Hydroxide |                | Ceiling: 2 mg/m <sup>3</sup>            |                              | 2 mg/m <sup>3</sup> Ceiling<br>2 mg/m <sup>3</sup> TWA |                          | CEV: 2 mg/m <sup>3</sup> |
| Chemical Name    | European Union | China                                   | Japan                        | Korea  | Australia                | Taiwan                   |
| Sodium Hydroxide |                | Ceiling: 2 mg/m <sup>3</sup><br>Ceiling | Ceiling: 2 mg/m <sup>3</sup> | Ceiling: 2 mg/m <sup>3</sup>                           | 2 mg/m <sup>3</sup> Peak | TWA: 2 mg/m <sup>3</sup> |

### Exposure Guidelines

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

### Engineering Controls:

Ensure adequate ventilation, especially in confined areas

### Personal protective equipment (PPE)

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**Eye/Face Protection:** Tight sealing safety goggles. Face protection shield.  
**Body Protection:** Gloves made of plastic or rubber. Rubber boots. Suitable protective clothing. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate.

### General Hygiene Considerations:

Wash contaminated clothing before reuse. When using do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

|                        |                            |                        |                          |
|------------------------|----------------------------|------------------------|--------------------------|
| <b>Physical State:</b> | Liquid                     | <b>Odor:</b>           | Odorless                 |
| <b>Appearance:</b>     | Clear to opaque            | <b>Odor Threshold:</b> | No information available |
| <b>Color:</b>          | Colorless Almost colorless |                        |                          |

| <u>Property</u>                                | <u>Values</u>                            | <u>Remarks • Method</u>          |
|--|--|----------------------------------|
| <b>pH:</b>                                     | 14.0                                     |                                  |
| <b>"Salt Out" Point (°F):</b>                  |  | No information available         |
| <b>Melting Point/Freezing Point:</b>           | -26 to 59 °F / -32 to 15 °C              |                                  |
| <b>Boiling Point/Boiling Range:</b>            | 215-291 °F / 102-144 °C                  |                                  |
| <b>Flash Point:</b>                            |  | No information available         |
| <b>Evaporation Rate (BuAc=1):</b>              |  | No information available         |
| <b>Flammability (solid, gas):</b>              |  | No information available         |
| <b>Flammability Limits in Air:</b>             |  | No information available         |
| <b>Upper Flammability Limit:</b>               |  | <b>Lower Flammability Limit:</b> |
| <b>Vapor Pressure (mm Hg) :</b>                | 13-135                                   | Like Water                       |
| <b>Vapor density (Air =1)</b>                  |  | No information available         |
| <b>Specific Gravity (H<sub>2</sub>O=1):</b>    | 1.05-1.56                                | No information available         |
| <b>Specific Gravity (2nd value):</b>           |  | No information available         |
| <b>Water Solubility:</b>                       | 100% soluble in water                    |                                  |
| <b>Solubility(ies):</b>                        |  | No information available         |
| <b>Partition Coefficient (n-octanol/water)</b> |  | No information available         |
| <b>Autoignition Temperature:</b>               |  | No information available         |
| <b>Decomposition Temperature:</b>              |  | No information available         |
| <b>Kinematic Viscosity:</b>                    | 24 for 50% solution                      | @ 40 °C                          |
| <b>Dynamic Viscosity:</b>                      |  | No information available         |
| <b>Oxidizing Properties:</b>                   | No information available                 |                                  |
| <b>Explosive Properties:</b>                   | Not considered to be an explosion hazard |                                  |

### 9.2. Other information

|                          |                          |
|--------------------------|--------------------------|
| <b>Softening Point:</b>  | No information available |
| <b>Molecular Weight:</b> | 40.01                    |
| <b>VOC Content(%):</b>   | No information available |
| <b>Density:</b>          | 8.8-13.0 lb/gal          |
| <b>Bulk Density:</b>     | No information available |

## 10. Stability and Reactivity

|  |  |
|--|--|
| <b>Stability:</b>                        | Stable under normal conditions of use and storage                                  |
| <b>Conditions to Avoid:</b>              | Exposure to air or moisture over prolonged periods; Incompatibles; Heat            |
| <b>Incompatible Materials:</b>           | Strong acids and bases, Oxidizing agents, Aluminum, Tin, Zinc                      |
| <b>Hazardous Decomposition Products:</b> | Thermal decomposition can lead to release of irritating and toxic gases and vapors |

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Possibility of Hazardous Reactions: None under normal processing

### 11. Toxicological Information

#### Product Information

**Acute Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

| Chemical Name    | Oral LD <sub>50</sub> : | Dermal LD <sub>50</sub> : | LC <sub>50</sub> (Lethal Concentration): |
|------------------|-------------------------|---------------------------|--|
| Sodium chloride  | 3 g/kg ( Rat )          | 10 g/kg ( Rabbit )        | 42 g/m <sup>3</sup> ( Rat ) 1 h          |
| Sodium Hydroxide |                         | 1350 mg/kg ( Rabbit )     |  |
| Water            | 90 mL/kg ( Rat )        |                           |  |

#### Chronic Toxicity:

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

**Target Organ Effects:** Eyes, Respiratory system, Skin

### 12. Ecological Information

#### Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name    | Toxicity to algae | Toxicity to fish   | Toxicity to daphnia and other aquatic invertebrates  |
|------------------|-------------------|--|--|
| Sodium chloride  |                   | 5560 - 6080: 96 h <i>Lepomis macrochirus</i> mg/L LC50<br>flow-through 6020 - 7070: 96 h <i>Pimephales promelas</i> mg/L LC50<br>static 12946: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 7050:<br>96 h <i>Pimephales promelas</i> mg/L LC50 semi-static 6420 - 6700: 96 h <i>Pimephales promelas</i> mg/L LC50<br>static 4747 - 7824: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50<br>flow-through | 1000: 48 h <i>Daphnia magna</i> mg/L<br>EC50 340.7 - 469.2: 48 h <i>Daphnia magna</i> mg/L EC50 Static |
| Sodium Hydroxide |                   | 45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static   |  |

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

**Mobility:** No information available.

### 13. Disposal Considerations

**Waste from Residues/Unused Products:** Disposal should be in accordance with applicable regional, national and local laws and regulations

**Contaminated Packaging:** Do not reuse container.

### 14. Transport Information

## 813655 Sodium Hydroxide 50% Diaphragm

### DOT

Proper shipping name SODIUM HYDROXIDE SOLUTION  
Hazard Class 8  
UN/ID No UN1824  
Packing Group II  
Reportable Quantity (RQ) 1000 lbs  
Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II



### 15. Regulatory Information

#### International Inventories

All of the components in the product are on the following Inventory lists: TSCA (United States);, Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), South Korea (KECL);, China (IECSC), Philippines (PICCS), This product contains a substance not listed on international inventories - it is for research and development use only.

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

| Chemical Name    | AICS   | TSCA   | DSL    | NDSL | EINECS | ELINCS | ENCS                | IECSC  | KECL     | PICCS   |
|------------------|--------|--------|--------|------|--------|--------|---------------------|--------|----------|---------|
| Sodium chloride  | Listed | Listed | Listed | -    | Listed | -      | (1)-236             | Listed | KE-31387 | Present |
| Sodium Hydroxide | Listed | Listed | Listed | -    | Listed | -      | (2)-1972<br>(1)-410 | Listed | KE-31487 | Listed  |
| Water            | Listed | Listed | Listed | -    | Listed | -      | -                   | Listed | KE-35400 | 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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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| Chemical Name    | CERCLA Hazardous Substances and the Reportable Quantities | SARA Extremely Hazardous Substances EPCRA RQ | SARA Extremely Hazardous Substances TPQ |
|------------------|---|--|---|
| Sodium Hydroxide | 1000 lb<br>454 kg   | -  | -                                       |

### **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  |

### **U.S. State Right-to-Know Regulations**

#### **California Proposition 65:**

This product does not contain any Proposition 65 chemicals

## **16. Other Information**

### **National Fire Protection Association (NFPA) Ratings**



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



Certified to  
NSF/ANSI 60

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

Prepared By: HSE Department

Issue Date: 08-May-2012

Revision Date: 08-Mar-2017

Revision Note: Reviewed and Re-issued.

## 813655 Sodium Hydroxide 50% Diaphragm

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### **Disclaimer:**

Please be advised that it is your responsibility to inform your employees of the hazards of this substance, to advise them of what these properties mean and be sure they understand exposure information. 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 presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, express or implied, is made regarding performance, stability, or otherwise. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage. Other factors may require additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, the handling and use remains the responsibility of the consumer. No suggestions are intended as, and should not be constructed as, a recommendation to infringe on any existing patents or to violate any Federal, State, or local laws.

**End of Safety Data Sheet**