

Safety Data Sheet

Sodium Hydroxide, 0.3M

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Sodium Hydroxide, 0.3M
Recommended Use: Science education applications
Synonyms: Caustic Soda, Lye, Sodium Hydroxide 0.3N
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Causes severe skin burns and eye damage. Causes serious eye damage. Harmful to aquatic life.

GHS Classification:

Skin Corrosion/Irritation Category 1B, Serious Eye Damage/Eye Irritation Category 1, Hazardous to the aquatic environment - Acute Category 3

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|----------------------|--------------|----------|
| Water | 7732-18-5 | 99.22 |
| | | 99.2 |
| Sodium Hydroxide | 1310-73-2 | 0.8 |
| | | 0.78 |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Section 5 Firefighting Procedures

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

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Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 Handling and Storage

Handling: Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Storage: Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8 Protection Information

| <u>Chemical Name</u> | <u>ACGIH</u> | <u>OSHA PEL</u> |
|----------------------|-------------------------|---------------------------------|
| Sodium Hydroxide | (TWA) N/A (STEL) N/A | (TWA) 2 mg/m3 TWA (STEL) N/A |

Control Parameters

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Respirator Type(s): None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Natural latex,, Neoprene, Nitrile

Section 9 Physical Data

| | |
|---|--|
| Formula: See Section 3 | Vapor Pressure: No data available |
| Molecular Weight: 40.0 (Sodium Hydroxide) | Evaporation Rate (BuAc=1): No data available |
| Appearance: Colorless Liquid | Vapor Density (Air=1): No data available |
| Odor: None | Specific Gravity: > 1 |
| Odor Threshold: No data available | Solubility in Water: Soluble |
| pH: 13 | Log Pow (calculated): No data available |
| Melting Point: No data available | Autoignition Temperature: No data available |
| Boiling Point: No data available | Decomposition Temperature: No data available |
| Flash Point: No data available | Viscosity: 10 |
| Flammable Limits in Air: No data available | Percent Volatile by Volume: No data available |

Section 10 Reactivity Data

Reactivity: Not generally reactive under normal conditions.

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Incompatible Materials: Water-reactive materials

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry Ingestion, skin and eye contact.

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Symptoms (Acute): Gastrointestinal,, Coffee Ground Emesis
Delayed Effects: No data available

Acute Toxicity:

| Chemical Name | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|------------|------------------------------|-------------|-----------------|
| Water | 7732-18-5 | Oral LD50 Rat 90000 mg/kg | | |

Carcinogenicity:

| Chemical Name | CAS Number | IARC | NTP | OSHA |
|------------------|------------|------------|------------|------------|
| Sodium Hydroxide | 1310-73-2 | Not listed | Not listed | Not listed |

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: No data available
Chronic: No data available

Section 12

Ecological Data

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.
Mobility: This material is expected to have high mobility in soil. It absorbs weakly to most soil types.
Persistence: Dissolved into water
Bioaccumulation: Bioconcentration is not expected to occur.
Degradability: Does not biodegrade readily.
Other Adverse Effects: No data

| Chemical Name | CAS Number | Eco Toxicity |
|------------------|------------|--|
| Water | 7732-18-5 | No data available |
| Sodium Hydroxide | 1310-73-2 | Aquatic LC50 (96h) Rainbow Trout 45.4 MG/L |

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): If discarded, this product is considered a RCRA corrosive waste, D002.

Section 14

Transport Information

| Ground - DOT Proper Shipping Name: | Air - IATA Proper Shipping Name: |
|--|--|
| UN1824 Sodium Hydroxide Solution Class 8 P.G. III | UN1824 Sodium Hydroxide Solution Class 8 P.G. III |

Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|------------------|------------|------------|----------|-----------|-----------|---------------|
| Sodium Hydroxide | 1310-73-2 | No | No | No | No | No |

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 08/27/2014

Printed: 09-11-2014

Safety Data Sheet

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

| | | | |
|--------|---|------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service Number | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL | Permissible Exposure Limit |
| DOT | U.S. Department of Transportation | ppm | Parts per million |
| IARC | International Agency for Research on Cancer | RCRA | Resource Conservation and Recovery Act |
| N/A | Not Available | SARA | Superfund Amendments and Reauthorization Act |
| | | TLV | Threshold Limit Value |
| | | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |