

MATERIAL SAFETY DATA SHEET

Sodium Hydroxide 5 N (20% Solution)

SECTION 1 . Product and Company Identification

Product Name and Synonym: Sodium Hydroxide 5 N (20% Solution)

Product Code: 285-33-5

Material Uses:
Manufacturer: OFI Testing Equipment, Inc.
11302 Steeplecrest Drive
Houston, TX 77065 USA
Phone: (713) 880-9885
Fax: (713) 880-9886

Entry Date : 9/8/2009

Print Date: 8/2/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

| | | | | |
|---------------------|--------|----------------------|------|---------|
| Health: | 3 | | | |
| Flammability: | 0 | | | |
| Reactivity: | 1 | | | |
| Hazard Rating: | | | | |
| Least | Slight | Moderate | High | Extreme |
| 0 | 1 | 2 | 3 | 4 |
| NA = Not Applicable | | NE = Not Established | | |

SECTION 2 HAZARD IDENTIFICATION

Causes severe irritation and burns. May Be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Emergency Overview: Poison! Danger! Corrosive. May be fatal if swallowed. Harmful if inhaled. Causes burns to any area of contact. Reacts with water, acids and other materials.

Inhalation: Severe Irritant: Effects from Inhalation of Mists vary from Mild Irritation to Serious Damage of the Upper Respiratory Tract, Depending on Severity of Exposure. Systems may Include Sneezing. Sore Throat or Runny Nose. Severe Pneuomonitis may Occur.

Ingestion: CORROSIVE! Swallowing may Cause Burns of the Mouth. Throat and Stomach. Severe Scaring of Tissue and Death may result. Symptoms may Include Bleeding, Vomiting, Diarrhea, Fall in Blood Pressure. Damage may Appear Days after Exposure

Skin: CORROSIVE! Contact with Skin can Cause Irritation or Severe Burns and Scarring with Greater Exposures.

Eye Contact: CORROSIVE! Causes Irritation to Eyes, and with Greater Exposures, Severe Buns with Possibly Blindness Resulting.

Chronic Exposure: Persons with Pre-Existing Skin Disorders or Eye Problems or Impaired Respiratory Function may be More Susceptible to the Effects of the Substance.

Aggravated by Exposure: Persons with Pre-Existing Skin Disorders or Eye Problems or Impaired Respiratory Function may be More Susceptible to the Effects of the Substance.

SECTION 3 MIXTURE COMPONENTS

| SARA 313 | Component | CAS Number | Percent Comp. | Dimension | Exposure Limits |
|-------------------------------------|-------------------------------|----------------|---------------|-----------|---|
| <input checked="" type="checkbox"/> | Sodium Hydroxide | CAS# 1310-73-2 | 20% | W/V | OSHA PEL 2 mg/m ³ ACGIH 2mg/m ³ |
| <input type="checkbox"/> | Water, Deionized ASTM Type II | CAS# 7732-18-5 | Balance | V/V | None Established |

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SECTION 4 FIRST AID MEASURES

Causes severe irritation and burns. May Be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

If swallowed give large quantities of water and get medical attention immediately.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Water spray, Carbon dioxide, dry chemical, powder, foam.

Fire / Explosion Hazards: None

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate area of leak. Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak acid as acetic, hydrochloric or sulfuric. Do not flush to sewer.

Ventilate area of Leak or Spill. Keep Unnecessary and Unprotected People away from the area of Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Contain and Recover Liquid when Possible. Residues from Spills can be Diluted with Water. Neutralized with Dilute Acid such as Acetic. Hydrochloric or Sulfuric/ bsorb Neutralized Caustic Residue on Clay. Vermiculite or other Inert Substance and Package in Suitable Container for Disposal. US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water, and Air in Excess to Reportable Quantities. Do Not Flush to Sewer!

SECTION 7 HANDLING AND STORAGE

Store in a cool, dry, well-ventilated place away from incompatible materials. Wash thoroughly after handling. Store separately from acids and alkalis. Containers of this material may remain hazardous when empty. Protect from freezing.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH/MSHA-approved respirator

Ventilation

Local Exhaust

Mechanical

Protective Gloves: NIOSH Approved Gloves

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point: Information not available Percent Volatile by Volume: 80%

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| | | | |
|----------------------|---------------------------|---------------------------|---------------------------|
| Boiling Point: | Information not available | Evaporation Rate | Information not available |
| Vapor Pressure: | Information not available | Evaporation Standard | |
| Vapor Density: | Information not available | Auto Ignition Temp | Not applicable |
| Solubility in Water: | Soluble | Lower Flamm. Limit in Air | Not applicable |
| Appearance /Odors: | Clear odorless liquid | Upper Flamm. Limit in Air | Not applicable |
| Flash Point: | Not applicable | | |
| Specific Gravity: | 1.2 | | |

SECTION 10 STABILITY AND REACTIVITY INFORMATION

| | |
|-----------------------------------|--|
| Stability: | Stable |
| Conditions to Avoid: | Avoid contact with incompatible materials. |
| Materials to Avoid: | Acids, flammable liquids, organic halogens, metals, nitrocompounds |
| Hazardous Decomposition Products: | Not established. |
| Hazardous polymerization: | Will Not Occur |
| Conditions to Avoid: | None known |

SECTION 11 Toxicological Information

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category - None

SECTION 12 Ecological Information

Environmental Fate: No Information Found

Environmental Toxicity: No Information Found

SECTION 13 Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 Transport Information

DOT Classification: Sodium Hydroxide Solution, 8, UN1824, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

Chemical Inventory Status –
Part 1:Ingredient
Sodium Hydroxide (1310-73-2)
TSCA Yes
EC Yes
Japan YES
Australia Yes

Chemical Inventory Status –
Part 2:Ingredient
Sodium Hydroxide (1310-73-2)

Sodium Hydroxide 5 N (20% Solution)

Korea Yes
 DSL Yes
 NDSL No
 Phil. Yes

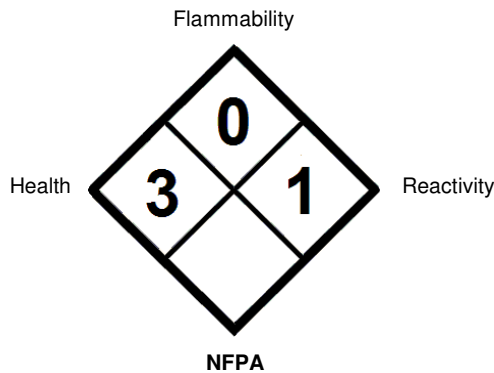
Federal, State & International Regulations –
 Part 1: Ingredient.
 Sodium Hydroxide (1310-73-2)
 RQ No
 TPQ No
 List NO
 Chemical Catg No

Federal, State &
 International Regulations –
 Part 2:Ingredient
 Sodium Hydroxide (1310-73-2)
 CERCLA 1000
 261.33 No
 8(d) No

Chemical Weapons Convention: No
 TSCA 12 (b):No
 CDTA:No PURE/LIQUID
 SARA 311/312: Acute:YES
 Chronic: No
 Fire: No
 Pressure: No
 Reactivity: No
 Australian Hazchem Code: 2R
 Poison Schedule:S5

SECTION 16 Additional Information

Conditions aggravated/target organs: Poison! Danger! Corrosive! Persons with pre-existing skin and eye disorders will be more susceptible. Acute: Skin and eye irritation or burns. Chronic: Dermatitis, eye damage. Causes burns to any area of contact. Reacts with water, acids and other materials.



Revisions

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|----------|-----|--|
| | 0 | |
| 8/2/2010 | 0.1 | updated msds to 16 section from 10 section msds. STN |

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