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CHEMTECH CA PO BOX 908 TURLOCK, CA 95381

# SAFETY DATA SHEET

# **SECTION 1 - IDENTIFICATION**

Product Identifier: SODIUM HYDROXIDE 50% Product Code: 408

Product Use: Chemical manufacturing.

CHEMTECH CA

PO BOX 908

TURLOCK, CA 95381 (209)669-3474

**24 Hr. Emergency Tel.#:** 800-595-9110

# **SECTION 2 - HAZARDS IDENTIFICATION**

## Classification of the Substance or Mixture:

Skin Corrosion - Category 1 Serious Eye Damage - Category 1 Acute Toxicity - Oral Category 4 Acute Toxicity - Dermal Category 5 Corrosive to Metals - Category 1

Signal Word: DANGER



Causes severe skin burns and eye damage

May be corrosive to metals

Harmful if swallowed

May be harmful in contact with skin

# **Precautionary Statements:**

## Prevention

Wash hands thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection.

Keep only in original container.

Do not eat, drink or smoke when using this product.

# Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF ON SKIN: Wash with soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

For specific treatment see Section 4 First Aid.

#### Storage

Store in a corrosive resistant container with a resistant inner liner.

Store locked up.

#### Disposal

Dispose of contents/container in accordance with local regulations.

### Hazards not Otherwise Classified:

No other hazards classified.





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# **SAFETY DATA SHEET**

# SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Synonym	CAS Number	Concentration
SODIUM HYDROXIDE	CAUSTIC SODA	1310-73-2	47-52%

## **SECTION 4 - FIRST-AID MEASURES**

Inhalation: Get medical advice/attention if you feel unwell or are concerned.

Skin Contact: Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower with a flushing duration of 60 minutes. Immediately call POISON CENTER/doctor. Wash contaminated clothing before re-use.

Eye Contact: Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 60 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a POISON CENTER/doctor. Continue rinsing until medical aid is available.

Ingestion: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

Most Important Symptoms and Effects, both Acute and Delayed: Causes severe skin burns and eye damage, burning of the mouth, throat, and esophagus.

Indication of any Immediate Medical Attention and Special Treatment Needed: Treat symptomatically

# SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media: Use water spray, powder, foam, carbon dioxide.

Special hazards arising from the substance or mixture: Hot or molten material can react violently with water. Can react with certain metals, such as aluminum, to generate flammable Hydrogen gas.

Flammability classification (OSHA 29 CFR 1910.106) (Hazcom 2012): Non flammable

Hazardous Combustion Products: May cause fire and explosions when in contact with incompatible materials.

Special protective equipment and precautions for firefighters: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

# **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**Methods and materials for containment and cleaning up:** Contain and recover liquid when possible. Do not let product enter drains. Residues from spills can be diluted with water, neutralized with dilute acid and collected with dry earth, sand or other non-combustible material and disposed of in appropriate container.

# **SECTION 7 - HANDLING AND STORAGE**

**Precautions for Safe Handling:** Wear at least chemical resistant gloves and eye protection, face shield, and chemical resistant garments when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.

Conditions for Safe Storage: Keep product in tightly closed container when not in use. Do not drop, roll, or skid drum. Store in a cool, dry, well-ventilated area away from heat or open flame.

Incompatible Materials: Avoid strong oxidizing agents, soft metals, acids, and heat.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Identity	CAS Number	Туре	Exposure Limit Values	Source
SODIUM HYDROXIDE	1310-73-2	PEL	2 mg/m3	OSHA
		REL	2 mg/m3	NIOSH
		TLV	2 mg/m3	ACGIH

Ventilation and engineering measures: Forced air, local exhaust, or open air is adequate.

Respiratory Protection: Not a respiratory irritant unless dealing with a mist form, then wear appropriate NIOSH respirator.

Skin Protection: Wear chemical resistant gloves and chemical resistant garments when handling, wash garments before re-use.

Eye/Face Protection: Wear safety glasses, goggles and/or face shield to prevent eye contact.

Other Protective Equipment: Eye wash facility and emergency shower should be in close proximity.

General Hygiene Conditions: Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industry hygiene and safety practice.

# **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Clear, colorless solution

Odor: Odorless

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**pH**: >12

Melting/Freezing point: 13°C / 56°F

Initial boiling point and boiling range:  $144 \,^{\circ}\text{C}$  /  $291 \,^{\circ}\text{F}$ 

Flammability (solid, gas): Non flammable

Specific gravity: 1.53 g/mL Solubility in Water: Complete

Decomposition temperature: No information available

Viscosity: 10-30 cSt at 20°C / 68°F

## **SECTION 10 - STABILITY AND REACTIVITY**

Reactivity: Reactive with oxidizing agents, reducing agents, metals, acids and alkalis.

Chemical Stability: Stable under normal conditions

Possibility of Hazardous Reactions: Reactive with oxidizing agents, reducing agents, metals, acids and alkalis.

Conditions to Avoid: Incompatible materials

Incompatible Materials: Contact with acids and organic halogen compounds, especially Trichloroethylene, may cause violent reactions.

Hazardous Decomposition Products: Sodium Oxide. Decomposition by reaction with certain metals releases flammable and explosive Hydrogen gas.

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure:

Routes of entry - inhalation: YES Routes of entry - skin & eye: YES Routes of entry - ingestion: YES

#### **Potential Health Effects:**

### Signs and symptoms of short term (acute) exposure:

**Inhalation:** Severe irritant. Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.

**Ingestion:** Corrosive! Swallowing causes severe burns of mouth, throat, and stomach. Severe scarring of tissue, corrosion, permanent tissue destruction and death may result. Symptoms may include severe pain, nausea, vomiting, diarrhea, shock, hemorrhaging and/or fall in blood pressure. Damage may appear days after exposure.

Skin: Corrosive! Contact with skin causes irritation or severe burns and scarring with greater exposures.

Eye: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

### Potential Chronic Health Effects:

Mutagenicity: Not known to have mutagenic effects in humans or animals.

Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

Reproductive effects: No known reproductive effects in humans or animals.

Sensitization to material: Not a known sensitizer in humans or animals.

Specific target organ effects: No information available

Toxicological data: The calculated ATE values for this mixture are:

ATE oral = 2000 mg/kg ATE dermal = 2700 mg/kg

ATE inhalation (vapors) = No information available

# **SECTION 12 - ECOLOGICAL INFORMATION**

Persistence and degradability: Not expected to persist. Readily biodegradable.

Bioaccumulation potential: Not expected to bioaccumulate.

Mobility in soil: Soluble in water and mobile in soil.

# **SECTION 13 - DISPOSAL CONSIDERATIONS**

Handling for disposal: Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, rinse container well.

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Method of disposal: Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA: Not a listed RCRA hazardous waste.

### **SECTION 14 - TRANSPORTATION INFORMATION**

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Please note the GHS and DOT Standards are NOT identical and therefore can have varying classifications

### US 49 CFR/DOT/IATA/IMDG Information:

UN No.: 1824

UN Proper Shipping Name: Sodium Hydroxide, Solution

Transportation hazard class(es): 8

Packing Group: III

Environmental hazards: Not a Marine Pollutant

# **SECTION 15 - REGULATORY INFORMATION**

#### **US Federal Information:**

TSCA information: All components are listed on the TSCA inventory.

US CERCLA Reportable quantity (RQ): Sodium hydroxide has a RQ of 1000 pounds of pure chemical.

SARA Title III: Acute Health Hazard

US State Right to Know Laws: (Not a comprehensive list)

International Information: CANADIAN FEDERAL REGULATIONS: (Not a comprehensive list), CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): Sodium hydroxide is on the Domestic Substances List (DSL).

## **SECTION 16 - OTHER INFORMATION**

### Legend:

SARA: The Superfund Amendments and Reauthorization Act

RCRA: Resource Conservation and Recovery Act

TSCA: Toxic Substances Control Act
CFR: Code of Federal Regulations
DOT: Department of Transportation
ATE: Acute Toxicity Estimate

Preparation date: 3/23/2017