

**THATCHER COMPANY MATERIAL SAFETY DATA SHEET****PRODUCT: CAUSTIC SODA SOLUTION, 50%**

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MSDS Date: July 11, 2003

Emergency Contact: 1-800-424-9300

**SECTION I****PRODUCT NAME:** Caustic Soda Solution, 50%**CHEMICAL NAME:** Sodium Hydroxide Solution**CHEMICAL NAME:** Metal Hydroxide**DOT SHIPPING INFORMATION:** Sodium Hydroxide Solution, 8  
UN 1824, PG II RQ = 1000 Lbs**SECTION II - HAZARDOUS INGREDIENTS**

This material contains no ingredients which are known by Thatcher Company to be hazardous unless listed below.

HAZARDOUS MATERIAL	CAS NUMBER	w/w %	EXPOSURE LIMITS IN AIR
Sodium hydroxide	1310-73-2	-----	PEL/TLV = 2 mg/m <sup>3</sup> TWA

The specific identity of some ingredients may be withheld for confidential business purposes. However, all known potential health effects from exposure to these ingredients are being addressed.

**SECTION III - PHYSICAL DATA****BOILING POINT (F):** 143 C**SPECIFIC GRAVITY:** 1.54 @ 15.6 C**VAPOR PRESSURE (mm Hg):** 13 @ 60 C**% VOLATILE, BY VOLUME:** 50%**VAPOR DENSITY (air = 1):** N/A**EVAPORATION RATE:** N/A**SOLUBILITY IN WATER:** Complete**APPEARANCE AND ODOR:** Water-white, clear to slightly turbid liquid with no odor.**SECTION IV - FIRE AND EXPLOSION DATA****NFPA RATING:** Health = 3 Fire = 0 Reactivity = 1**FLASH POINT:** Nonflammable**FLAMMABLE LIMITS:** Lel: N/A Uel: N/A**EXTINGUISHING MEDIA:**

Water spray, foam, carbon dioxide or dry chemicals.

**SPECIAL FIRE-FIGHTING PROCEDURES:**

Protective equipment and self-contained breathing apparatus should be worn.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Avoid direct contact with water; considerable heat is generated, resulting in dangerous boiling and spattering.



**SECTION V - REACTIVITY DATA**

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:**

Will not occur

**CONDITIONS OR MATERIALS TO AVOID:**

Avoid contact with other chemicals, especially organics, metals and strong acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon monoxide gas can form upon contact with food and beverages in an enclosed area.

**SECTION VI - HEALTH HAZARD DATA**

**Carcinogenic Listing:**

NTP: No ingredients listed in this section.

IARC MONOGRAPHS: No ingredients listed in this section.

OSHA 29 CFR 1910: No ingredients listed in this section.

**ENTRY ROUTES & EFFECTS OF OVEREXPOSURE:**

**Contact:** Corrosive. Can cause extensive burns to eyes, skin and mucous membranes. Severe contact can result in permanent blindness.

**Inhalation:** Vapor can cause discomfort and/or tissue damage to lungs and upper respiratory tract.

**Ingestion:** Highly toxic. Harmful or fatal if swallowed. Causes severe burns to the gastrointestinal system.

**STATEMENT OF PRACTICAL TREATMENT:**

**Contact:** *Immediately* flush exposed area thoroughly with water. For eyes, flush for at least 15 minutes. Obtain prompt medical assistance.

**Inhalation:** Remove at once to fresh air. If breathing has stopped, administer artificial respiration. Seek medical attention.

**Ingestion:** If conscious, give several glasses of water or milk followed by citrus juice or dilute vinegar. *Do not* induce vomiting! Call a physician or local Poison Control Center at once!

**SECTION VII - SPECIAL PRECAUTIONS**

**HANDLING AND STORAGE PRECAUTIONS:**

Avoid all contact. Do not take internally. Do not breathe vapor. Wash thoroughly after handling. Ensure lids are tightly secured. Store in a cool, dry area.

**STEPS TO BE TAKEN IF MATERIAL SPILLS OR LEAKS:**

Evacuate area. Wear proper safety equipment. Dike the liquid and recover into containers. Dilute residue



with water and neutralize with dilute acid (preferably acetic acid may be used to neutralize residual traces of caustic soda). Place into containers for proper disposal. (See below).

**WASTE DISPOSAL METHOD:**

Waste product is an EPA hazardous waste (D002) due to corrosivity and must be disposed of at an EPA approved waste disposal facility. Contact local EPA office. Comply with all local, state and federal regulations.

**OTHER PRECAUTION:**

Avoid contact with aluminum, tin, strong acids, zinc and alloys.

**SECTION VIII - SPECIAL PROTECTION INFORMATION**

**RESPIRATORY PROTECTION:**

Self-contained organic respirator must be available.

**VENTILATION:**

Maintain ventilation to keep TLV below 2 mg/m<sup>3</sup>.

**EYE PROTECTION:**

Chemical goggles, face shield.

**SKIN PROTECTION:**

Acid suit, rubber boots, vinyl or neoprene gloves.

**OTHER PROTECTIVE EQUIPMENT:**

As needed to avoid all bodily contact and breathing of vapor.

**ACGIH** = American Conference of Governmental Industrial Hygienists

**CL** = Ceiling Level

**IARC** = International Agency for Research on Cancer: Monographs

**OSHA** = Occupational Safety and Health Administration

**N/A** = Not Applicable

**NTP** = National Toxicology Program: Annual Report on Carcinogens

**PEL** = Permissible Exposure Level (OSHA)

**TLV** = Threshold Limit Value (ACGIH)

**TWA** = Time Weighted Average over 8 Hours

**STEL** = Short Term Exposure Limit (ACGIH)

**ND** = Not Determined

This information is, to the best of our knowledge, accurate but may not be complete. THATCHER COMPANY furnishes this information in good faith, but without warranty, representation or guarantee of its accuracy, completeness, or reliability.