# SAFETY DATA SHEET



**Date Issued:** 04/12/2012

MSDS No: CSB

#### CAUSTIC SODA ANHYDROUS

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** CAUSTIC SODA ANHYDROUS

GENERAL USE: Cleaner, process chemical, petroleum industry, food processing, metal finishing

PRODUCT CODE: CSB

ALTERNATE TRADE NAME(S): Sodium hydroxide - dry, Solid; Caustic Soda - Beads, Caustic Soda - #2 Flake,

Caustic Soda - #4 Flake, Caustic Soda - Rayon, Caustic Soda - Diaphragm, Diaphragm Compounder

## **MANUFACTURER**

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

Distributed by Tarr, LLC P.O. Box 12570 Portland, OR 97212

**Service Number:** 503-288-5294

CHEMTREC (US Transportation): (800) 424 - 9300 CANUTEC (Canadian Transportation): (613) 996 - 6666

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** May cause burns to the respiratory tract, skin, eyes, and gastrointestinal tract. may cause permanent eye damage.

### POTENTIAL HEALTH EFFECTS

**EYES:** Short term exposure: Irritation (possibly severe), burns, eye damage, blindness. Long term exposure: visual disturbances

**SKIN:** Short term exposure: irritation (possibly severe), burns. Long term exposure: dermatitis.

**INGESTION:** Short term exposure: irritation (possibly severe), burns, nausea, vomiting. Long term exposure: to our knowledge, no effects are known.

**INHALATION:** Short term exposure: irritation (possibly severe), burns, pulmonary edema. Long term exposure: to our knowledge, no effects are known.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Sodium hydroxide	97 - 98.2	1310-73-2	215-185-5
Sodium chloride	0 - 1.2	7647-14-5	231-598-3
Carbonic acid, disodium salt	0.4 - 1	497-19-8	207-838-8

### 4. FIRST AID MEASURES

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**EYES:** Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

**SKIN:** Immediately flush contaminated areas with water./ Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing and shoes before reuse. Discard footwear which cannot be decontaminated. GET MEDICAL ATTENTION IMMEDIATELY.

**INGESTION:** Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting. Give large amounts of waster. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. GET MEDICAL ATTENTION IMMEDIATELY.

**INHALATION:** If adverse effects occur, remove to uncontaminated area. Give artificial respiration if no breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If respiration or pulse has stopped, have a trained person administer Basic Life support (Cardio-Pulmonary Resuscitation/Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY.

**NOTES TO PHYSICIAN:** The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage.

### 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not flammable.

**EXTINGUISHING MEDIA:** Do not use water. Use extinguishing agents appropriate for surrounding fire.

**EXPLOSION HAZARDS:** Negligible fire hazard.

**FIRE FIGHTING PROCEDURES:** Move container from fire area if it can be done without risk.

**SENSITIVE TO STATIC DISCHARGE:** Not sensitive.

**SENSITIVITY TO IMPACT:** Not sensitive.

## 6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Shovel dry material into suitable container. Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Release should be reported, if required, to appropriate agencies. Notify Local Emergency Planning Committee and State Emergency REsponse Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800) 424-8802 (USA) or (202) 426-2675 (USA).

#### 7. HANDLING AND STORAGE

**HANDLING:** Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. When mixing, slowly add to water to minimize heat generation and spattering.

**STORAGE:** Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE GUIDELINES**

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		SupplierOEL	
Chemical Name		ppm	mg/m³	ppm	mg/m³
Sodium hydroxide	TWA	[1]	2 [1]	NL	NL
	STEL	[2]	[2]	NL	NL
Carbonic acid, disodium salt	TWA	[1]	[1]	NL	NL
	STEL			NL	NL

## **OSHA TABLE COMMENTS:**

1. NL = Not Listed

2. C = Ceiling

**ENGINEERING CONTROLS:** provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear chemical resistant safety goggles if eye contact is likely. When wet mixing, wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**SKIN:** Wear suitable gloves. Discard contaminated leather goods. When wet mixing, wear chemical resistant gloves such as butyl rubber, natural rubber, neoprene or nitrile. Consult your safety equipment supplier.

**RESPIRATORY:** A NIOSH approved respirator with N95 (dust, fume, mist) filters may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. A half facepiece or full face air-purifying respirator maybe be used in certain circumstances. Supplied air should be used when the level is expected to be above 50x the acceptable level, or when there is a potential for uncontrolled release. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

**PROTECTIVE CLOTHING:** Wear protective clothing to minimize skin contact. When potential for contact with wet material exists, wear Tychem(R) SL or a similar chemical protective suit. When potential for contact with dry material exists, wear disposable coveralls such as Tyvek (R).

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Odorless.
COLOR: White
pH: Not Applicable

**PERCENT VOLATILE:** 0

**VAPOR PRESSURE:** NA = Not Applicable **VAPOR DENSITY:** NA = Not Applicable

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**BOILING POINT:** Not Applicable **MELTING POINT:** 318°C (604°F)

FLASHPOINT AND METHOD: Not flammable.

**SOLUBILITY IN WATER:** 100%

**EVAPORATION RATE:** Not Applicable **SPECIFIC GRAVITY:** 2.130 at 20°C

MOLECULAR WEIGHT: 40.0 Formula: NaOH

#### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal temperature and pressure.

POLYMERIZATION: Will not occur.

**CONDITIONS TO AVOID:** Avoid contact wit water. Direct contact with water may cause an exothermic reaction. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition products: None known.

**INCOMPATIBLE MATERIALS:** Acids, halogenated compounds, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

### 11. TOXICOLOGICAL INFORMATION

#### **ACUTE**

Chemical Name	DERMAL LD <sub>50</sub> (rabbit)
Sodium hydroxide	1350 mg/kg (Rabbit)

**INHALATION LC**<sub>50</sub>: Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis.

**EYE EFFECTS:** Can cause severe irritation, corrosion with possible corneal damage and blindness.

**SKIN EFFECTS:** This material may cause severe burns and permanent damage to any tissue with which it comes into contact. This material may cause severe irritation and corrosion of tissue.

**CHRONIC:** In general, chronic effects are due to long-term irritation. This material may cause dermatitis on the skin, or recurrent corneal ulceration and visual disturbances. In rare cases reports have noted long-term inhalation causes bronchial inflammatory reaction or obstructive airway dysfunction.

**COMMENTS:** As a solid, this material interacts with moist tissue to cause damage. When in solution, this material will affect all tissues with which it comes in contact. The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes.

### 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Fish Toxicity: This material has exhibited moderate toxicity to aquatic organisms.

**CHEMICAL FATE INFORMATION:** Biodegradation: This material is inorganic and not subject to biodegradation.

Persistence: This material will exist in the disassociated state.

Bioconcentration: This material is believed not to bioaccumulate.

**COMMENTS:** Other ecological information: This material has exhibited slight toxicity to terrestrial organisms.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Reuse or reprocess if possible. Dispose in accordance with all applicable regulations.

**RCRA/EPA WASTE INFORMATION:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

### 14. TRANSPORT INFORMATION

## **DOT (DEPARTMENT OF TRANSPORTATION)**

PROPER SHIPPING NAME: Sodium hydroxide, solid

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1823

PACKING GROUP: II

**NAERG:** 154

**LABEL:** Corrosive (8)

### 15. REGULATORY INFORMATION

#### **UNITED STATES**

#### DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Corrosive

## SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** This product should be reported as an immediate (acute) health hazard, and a reactivity hazard.

FIRE: No PRESSURE GENERATING: No REACTIVITY: Yes ACUTE: Yes CHRONIC: No 313 REPORTABLE INGREDIENTS: To the best of our knowledge, chemicals in this product are not listed

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as toxic chemicals under Section 313 of SARA Title III.

#### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** To the best of our knowledge, none of the chemicals in this product are listed as an extremely hazardous substance under Section 302 of SARA Title III nor does this product contain any other such substances.

## CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Sodium hydroxide	97 - 98.2	1,000 LBS.

## TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Sodium hydroxide	1310-73-2
Sodium chloride	7647-14-5
Carbonic acid, disodium salt	497-19-8

#### **CANADA**

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): Controlled Products Regulations (CPR): This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR).

WHMIS CLASS: This product has a WHMIS classification D 1 B, E.

**GENERAL COMMENTS:** The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

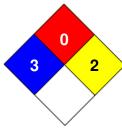
## 16. OTHER INFORMATION

### PREPARED BY: COMPLIANCE DEPT.

### **HMIS RATING**



#### NFPA CODES



**HMIS RATINGS NOTES:** The HMIS rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in the MSDS must be considered.

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