



SAFETY DATA SHEET

Sodium Hydroxide (Caustic Soda Bead)

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name (As Labeled):	Caustic Soda Beads
Chemical Name / Class	Sodium Hydroxide
Synonyms:	Caustic Soda; Soda lye; Sodium hydrate; Lye (beads, pearls, pellets, flake)
Recommended Use:	Various Industrial Applications
Company Identification:	APAC Chemical Corporation
Address:	150 N. Santa Anita Ave. Suite 850 Arcadia, CA 91006
Business Phone:	626-203-0066
CHEMTREC Emergency Assistance:	800-424-9300

SECTION 2 – HAZARDS IDENTIFICATION COMPOSITION

Appearance: White Solid. Danger! Hygroscopic (absorbs moisture from the air). Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract digestive tract irritation with possible burns.

Target Organs: Eyes, skin, mucous membranes

POTENTIAL HEALTH EFFECTS

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin burns. May cause deep, penetration ulcers of the skin. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May cause systemic effects.

Inhalation: Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Causes chemical burns to the respiratory tract.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Effects may be delayed.

Hazard Classification: Class 8

Pictogram:



Corrosive

Signal Word: Danger

Precautionary Statement:

Prevention:

P234 Keep only in original container.

P260 Do not breathe dust / fume / gas / mist / vapors / spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

SECTION 3 – INFORMATION ON INGREDIENTS

EMERGENCY OVERVIEW

CAS #	Chemical Name	%	EINECS #	Haz Symbols	Risk Phrases
1310-73-2	Sodium Hydroxide	> 99	215-185-5	C	35

SECTION 4 – FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

SECTION 5 – FIRE FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NOISH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Use water with caution and in flooding amounts. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials. Contact with metals may evolve flammable hydrogen gas.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Do NOT get water inside containers.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable

Explosion Limits, lower: Not available

Explosion Limits, upper: Not available

NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 1

SECTION 6 – ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Do not get water on spilled substances or inside containers.

SECTION 7– HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Do not allow water to get into the container because of violent reaction. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid ingestion and inhalation. Discard contaminated shoes. Use only with adequate ventilation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substance. Keep away from metals. Corrosives area. Keep away from acids. Soter protected from moisture. Containers must be tightly closed to prevent the conversion of NaOH to sodium carbonate by the CO₂ in air.

SECTION 8– EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

EXPOSURE LIMITS

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium hydroxide	2 mg/m ³ Ceiling	10 mg/m ³ IDLH	2 mg/m ³ TWA

OSHA Vacated PELs: No OSHA Vacated PELs are listed for this chemical.

PERSONAL PROTECTIVE EQUIPMENT

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

SECTION 9– PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: white

Odor: odorless

pH: 14 (5% aq soln)

Vapor pressure: 1mm HG @ 739 deg C

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 1390 deg C @ 760mm Hg

Freezing/Melting Point: 318 deg C

Solubility in water: Soluble

Specific Gravity/Density: 2.13 g/cm³

Molecular Formula: NaOH

Molecular Weight: 40.00

SECTION 10– STABILITY AND REACTIVITY

Chemical stability: Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Absorbs carbon dioxide from the air.

Possibility of hazardous reactions:

Reacts with ammonium salts, evolving ammonia gas. Reacts readily with various reducing sugars (i.e. fructose, galactose, maltose, dry whey solids) to produce

carbon monoxide. Take precautions including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.

Conditions to avoid: Avoid exposure to moisture.

Incompatible materials: Incompatible with ammonium salts, aluminum, tin, and zinc.

Hazardous decomposition products: None Known

SECTION 11– TOXICOLOGICAL INFORMATION

RTECS#: WB4900000

LD50/LC50: Draize test, rabbit, eye: 400 ug Mild; Draize test, rabbit, eye: 1% Severe; Draize test, rabbit, eye: 50 ug/24H Severe; Draize test, rabbit, eye: 1mg/24H Severe; Draize test, rabbit, skin: 500 mg/24H Severe

Carcinogenicity: Not listed by ACGIH, IARC, or NTP

Epidemiology: No information available

Teratogenicity: No information available

Reproductive Effects: No information available

Neurotoxicity: No information available

Mutagenicity: No information available

Ingestion: Swallowing can result in nausea, vomiting, diarrhea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

Inhalation: Breathing in mists or aerosols may produce respiratory irritation.

Other Studies: See actual entry in RTECS for complete information.

SECTION 12– ECOLOGICAL INFORMATION

No information available.

SECTION 13– DISPOSAL CONSIDERATIONS

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 Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed

RCRA U-Series: None listed

SECTION 14– TRANSPORT INFORMATION

US DOT: Shipping Name: SODIUM HYDROXIDE, SOLID Hazard Class: 8 UN Number: UN1823 Packing Group: II

Canadian TDG: No information available

USA RQ: 1000 lb final RQ; 454 kg final RQ

SECTION 15– REGULATORY INFORMATION

US FEDERAL

TSCA: listed on the TSCA inventory.

Health & Safety Reporting List: none of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.

Section 12b: None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs: 1000 lb final RQ: 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

SARA Code: acute, reactive

Section 313: No chemicals are reportable under Section 313.

Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act: listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

STATE AND LOCAL REGULATIONS

Sodium hydroxide can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California: No significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases: R 35 Causes severe burns

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

S 45 in case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection): 1

Canada listed on Canada's DSL List. This product has a WHMIS classification of E.

listed on Canada's Ingredient Disclosure List.

SECTION 16- ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.