

MATERIAL SAFETY DATA SHEET

Material Safety Data Sheet

LA0994
Caustic Soda Beads

Revision Date: 10/22/2001 Date of Printing: 11/26/2001

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: LA0994
Product Name: Caustic Soda Beads
Synonyms: Caustic soda or lye
Chemical Family: None Known
Application: Not Available.

Distributed By:
Vopak Canada Ltd. Vopak USA.
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Prepared By: The Safety, Health and Environment Department of Vopak
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(604) 303-2565
Vopak USA. Inc. Corporate Office Number: (425) 889-3400

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components:

Ingredients	Percent	LD50s and LC50s Route & Species:
Sodium Hydroxide 1310-73-2	100	Oral LDLo (Rabbit) : 500mg/kg

Notes:
No additional remark.

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact:
Causes severe eye irritation. Will damage tissue. Solutions are extremely
corrosive.

Skin Contact:
Causes severe burns.

Inhalation:
Corrosive to respiratory passages.

Ingestion:

Causes burns to the mouth, throat and stomach. May cause pain, nausea, vomiting and diarrhea.

4. FIRST AID MEASURES

Eye Contact:

Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention. Explantation: Use when animal or human data indicates that the material will cause severe irritation, burns or permanent damage. A Draiz Utmost speed is essential. Have an ophthalmologist make an evaluation of eye injury.

Skin Contact:

Flush with copious amounts of water. If wearing goggles, flush head and face thoroughly before removing goggles. Obtain medical attention immediately.

Inhalation:

None known.

Ingestion:

If swallowed, give at least 3-4 glasses of water, but do not induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Get medical attention.

Notes To Physician:

Treatment based on sound judgment of physician and individual reactions of patient.

5. FIRE FIGHTING MEASURES

Flash Point (C): None - will not burn. (F): None - will not burn.

Flash Point Method: Not applicable.

Autoignition Temperature (C): Not applicable. (F): Not applicable.

Flammable Limits in Air - Lower (%): Not applicable.

Flammable Limits in Air - Upper (%): Not applicable.

Extinguishing Media:

Use DRY chemicals, CO2, alcohol foam or water spray.

Special Exposure Hazards:

Do not use CO2 because it reacts exothermically with NaOH. NaOH can melt in a fire and molten material can react violently with small amounts of water. Reacts with metals to generate flammable hydrogen gas. Use flooding quantities of water.

Special Protective Equipment:

Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE:

HEALTH 3, FLAMMABILITY 0, REACTIVITY 1

HMIS RATINGS FOR THIS PRODUCT ARE:

HEALTH 3, FLAMMABILITY 0, REACTIVITY 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:

Wear appropriate protective equipment.

Environmental Precautionary:

Prevent from entering sewers, waterways or low areas.

Procedure for Cleaning/Absorption:

Pick up solids and put in an appropriate sealed container for later disposal. Flush area with water to remove trace residue. Prevent spilled material from entering sewers, confined spaces, drains, or waterways.

7. HANDLING AND STORAGE

Handling:

Avoid dust generation and provide for room ventilation during handling. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. When making solutions, use sufficient agitation and cooling, while adding slowly to surface of solution. Always add sodium hydroxide to water. Keep the containers closed when not in use.

Storage:

Keep containers tightly closed. Store in a dry, well ventilated area, separate from acids, peroxides, metals, easily ignitable materials and other incompatibles. Protect against moisture, water and physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Provide local exhaust to meet TLV requirements if making solutions or grinding up and mist or dust is generated. Ventilation facilities should be corrosion resistant. Localized ventilation should be used to control dust levels.

Respiratory Protection:

If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. Wear self-contained breathing apparatus.

Gloves:

Appropriate chemical resistant gloves should be worn.

Skin Protection:

Full protective clothing. (preferably made of rubber, neoprene or NBR)

Eyes:

Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data:

None known.

Hazardous Components:

Ingredients	Percent	ACGIH 2000 - Time Weighted Averages	OSHA - Vacated PELs - Time Weighted Averages
Sodium Hydroxide 1310-73-2	100	Not available.	Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid
Color: Clear
Odor: Odorless
pH: 14
Specific Gravity: 2.13 @ 25 deg C
Boiling Point (C): 1390 (F): 2534
Freezing Point (C): 318 (F): 604.4
Vapor Pressure: 1mm Hg @ 739 deg C
Vapor Density: Negligible
% Volatile by Volume: Negligible
Evaporation Rate: Not Available.
Solubility: Not Available.
VOCs (lbs/gallon): Not Available.
Viscosity: Not Available.
Molecular Weight: 40.00

10. STABILITY AND REACTIVITY

Chemical Stability:
Stable

Hazardous Polymerization:
Will not occur

Conditions to Avoid:
Open containers due to absorption of carbon dioxide and moisture from air.

Materials to Avoid:
Common metals and their alloys. Acids. Acid anhydrides. Oxidizable material. Contact with water causes an exothermic reaction.

Hazardous Decomposition Products:
None - remains chemically unchanged

Additional Information:
Contact with water may generate sufficient heat to ignite combustible materials.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure
Ingestion:
Causes burns to the mouth, throat and stomach. May cause pain, nausea, vomiting and diarrhea.

Skin Contact:
Causes severe burns.

Inhalation:
Corrosive to respiratory passages.

Eye Contact:
Causes severe eye irritation. Will damage tissue. Solutions are extremely corrosive.

Aggravated Conditions:
None known.

Carcinogenicity Comment:
None.

Other:
None known.

Acute Test:
Acute Oral LD50:
Not Available.

Acute Dermal LD50:
Not Available.

Acute Inhalation LC50:
Not Available.

Primary Irritation Effect:
Corrosive to tissue.

Carcinogenicity:
Not Available.

Genotoxicity:
Not Available.

Reproductive/Developmental Toxicity:
Not Available.

Teratogenicity:
Not Available.

Embryotoxicity:
Not Available.

Mutagenicity:
Not Available.

12. ECOLOGICAL INFORMATION

Mobility:
Not Available.

Persistence:
Not Available.

Bioaccumulative:
Not Available.

Ecotoxicological Information:
Acute Fish Toxicity:
Not Available.

Acute Crustaceans Toxicity:
Not Available.

Acute Algae Toxicity:
Not Available.

Chemical Fate Information:
Not Available.

Other Information:
180ppm/23hr/oysters/lethal/salt water pH 12.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method:

Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging:

Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: SODIUM HYDROXIDE, SOLID
Hazard Class: 8
UN/NA Number: UN1823
DOT Packing Group: II
DOT Reportable Quantity (lbs): 1000
Marine Pollutant: No.

ICAO/IATA:

IATA Proper Shipping Name: Sodium Hydroxide, Solid
Hazard Class: 8
UN/NA Number: UN1823
DOT Packing Group: II
IATA Label: Corrosive.
Remarks: No additional remark.

IMDG:

IMDG Proper Shipping Name: Sodium Hydroxide, Solid
Hazard Class: 8
Packing Group: II
EMS No.: 8-06
MFAG Table No.: Not applicable.
Marine Pollutant: No.
IMDG Flash Point (C): Not available.
IMDG Label: Corrosive.
Remarks: No additional remark.

TDG (Canada):

TDG Proper Shipping Name: Caustic Soda, Solid
Hazard Class: 8
UN Number: UN1823
Packing Group: II
Note: No additional remark.
Marine Pollutant: No.

15. REGULATORY INFORMATION

TSCA Inventory Status:

Listed on Inventory: YES

DSL Canadian Inventory Status:

All ingredients comply with the Canadian Domestic Substances List

U.S. Regulatory Rules

CERCLA/SARA - Section 302 Extremely Haz

This product complies with CERCLA/SARA - Section 302

SARA (311, 312) Hazard Class:

This product complies with SARAHZ

California Proposition 65:
The Cal Prop regulations apply to the product

MA Right to Know Law:
Not Listed:

New Jersey Right-to-Know List:
Listed.

Pennsylvania Right to Know List:
This product does not comply with PARTK

Canada - WHMIS Classification:
E CORROSIVE MATERIAL

16. OTHER INFORMATION

The following sections have been revised:
Nothing has been revised.

Additional Information:
None

Disclaimer:

NOTICE TO READER:

Vopak, expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Vopak Sales Office.

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END OF MSDS

===== END OF MSDS =====