

SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet Date Prepared: 5/23/01 Supersedes Date: 1/29/98

1. CHEMICAL PRODUCT AND COMPANY DESCRIPTION

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT
CONTACT: CHEMTREC (800-424-9300) IN THE UNITED STATES OR OCI (1-203-225-3100
or 1-888-278-1657); IN CANADA CONTACT CANUTEC (613) 996-6666.

For Product Information:

(800) 865-1774

Chemical Name or Synonym:

DISODIUM CARBONATE; SODA ASH; CARBONIC ACID, DISODIUM SALT

Molecular Formula:

Na₂CO₃

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	OSHA Hazard	Percentage
SODIUM CARBONATE	497-19-8	Y	100

3. HAZARDS IDENTIFICATION

A. Physical Appearance and Odor:

White granules solid, odorless

Warning Statements:

WARNING: CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION

B. POTENTIAL HEALTH EFFECTS

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3. HAZARDS IDENTIFICATION (Continued)

Acute Eye:

Causes irritation.

Acute Skin:

May cause redness, swelling.

Acute Inhalation:

May cause upper respiratory tract irritation, lung irritation.

Acute Ingestion:

Low acute oral toxicity. May cause nausea, vomiting, diarrhea, irritation, corrosion.

Chronic Effects:

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

4. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention.

Skin Exposure:

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Inhalation:

Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek immediate medical attention.

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4. *FIRST AID MEASURES (Continued)*

Ingestion:

If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. *FIRE FIGHTING MEASURES*

FIRE HAZARD DATA:

Flash Point:

Not Applicable

Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

Not combustible.

Hazardous Decomposition Materials (Under Fire Conditions)

Carbon dioxide

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6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Ventilate closed spaces before entering. Wear appropriate protective gear for situation. See Personal Protection information in Section 8.

Containment of Spill:

Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Scrape up and place in appropriate closed container (see Section 7: Handling and Storage). Collect washings for disposal. Decontaminate tools and equipment following cleanup. Clean up residual material by washing area with water. Avoid creation of dusty conditions.

Environmental and Regulatory Reporting:

Do not flush to drain. If spilled on the ground, the affected area should be scraped clean placed in an appropriate container for disposal. Prevent material from entering public sewer system or any waterways. Large spills should be handled according to a predetermined plan. For assistance in developing a plan contact with the Technical Service Department using the Product Information phone number in Section 1.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:

Not Available

Handling

Do not get in eyes. Do not breathe dusts. Avoid direct or prolonged contact with skin.

Storage

Store in an area that is cool, dry, well-ventilated

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting OSHA requirements. The following limits (AGGIH, OSHA and other) apply to this material, where, if indicated, S=skin and C=ceiling limit:

PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION

	Notes	TWA	STEL
OSHA		5 mg / cu m	

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the latest OSHA standard (29 CFR 1910.134) and/or ANSI Z88.2 recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by OSHA / ANSI: Air-purifying (half-mask / full-face) respirator with cartridges / canister approved for use against dusts, mists and fumes.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

Eye / Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

It is generally regarded as good practice to wear a minimum of safety glasses with side shields when working in industrial environments.

Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance:

White granules solid.

Odor:

Odorless

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9. *PHYSICAL AND CHEMICAL PROPERTIES (Continued)*

pH:

11.3 at 1 wt / wt %

Specific Gravity:

2.53 at 20°C (68 F)

Water Solubility:

Soluble

7 Wt / Wt % at 25°C (77 F)

Melting Point Range:

851°C (1564 F)

Boiling Point Range:

Not Available

Vapor Density:

Not Available

Molecular Weight:

105.99

10. *STABILITY AND REACTIVITY*

Chemical Stability:

This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

Extreme Heat

Materials / Chemicals To Be Avoided:

Aluminum

Fluorine

Humid Air

Moisture

Sulfuric Acid

Acids

Magnesium

Phosphorus Pentoxide

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10. STABILITY AND REACTIVITY (Continued)

Decomposition Temperature Range:
400°C (752 F)

The Following Hazardous Decomposition Products Might Be Expected:
Decomposition Type: Thermal
Carbon Dioxide

Hazardous Polymerization Will Not Occur.
Avoid The Following To Inhibit Hazardous Polymerization:
Not Applicable

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation:
Toxicological Information and Interpretation
Eye - Eye Irritation, 50 mg, Rabbit.
Severely Irritating.

Acute Skin Irritation:
Toxicological Information and Interpretation
Skin - Skin Irritation, Rabbit.
Mildly Irritating.

Acute Dermal Toxicity:
No Test Data Found For Product.

Acute Respiratory Irritation:
No Test Data Found For Product.

Acute Inhalation Toxicity:
Toxicological Information and Interpretation
LC50 - Lethal Concentration. 50% Of Test Species, 2300 mg/cu m/2hr, rat.

Acute Oral Toxicity:
Toxicological Information and Interpretation
LD50 - Lethal Dose 50% Of Test Species, 4090 mg/kg, rat.

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11. TOXICOLOGICAL INFORMATION (Continued)

Chronic Toxicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

No additional test data found for product.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

No data found for product.

Chemical Fate Information:

No data found for product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Container Handling and Disposal:

Rinse containers before disposal.

EPA Hazardous Waste - NO

14. TRANSPORTATION INFORMATION

Transportation Status:

US Department of Transportation

DOT Shipping Name:

NOT REGULATED

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15. REGULATORY INFORMATION

FEDERAL REGULATIONS

TSCA Inventory Status:

All ingredients of this product are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard	- NO
Reactive Hazard	- NO
Release of Pressure	- NO
Acute Health Hazard	- YES
Chronic Health Hazard	- NO

STATE REGULATIONS:

This product does not contain any components that are regulated under California Proposition 65.

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings - NFPA(R):

2	Health Hazard Rating - - Moderate
0	Flammability Rating - - Minimal
0	Reactivity Rating - - Minimal

National Paint & Coating Hazardous Materials Identification System - HMIS(R):

2	Health Hazard Rating - - Moderate
0	Flammability Rating - - Minimal
0	Reactivity Rating - - Minimal

Certified to ANSI/NSF 60 – Soda Ash Dense Bulk: This product is certified ANSI/NSF 60 when used in treatment of drinking water at maximum dosage of 100 mg/L.

Reason for Revisions:

Change and / or addition made to Section 1.

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16. OTHER INFORMATION (Continued)

Key Legend Information:

- NAV - Not Available
- NAP - Not Applicable
- ND - Not Determined
- ACGIH - American Conference of Governmental Industrial Hygienists
- OSHA - Occupational Safety and Health Administration
- TLV - Threshold Limit Value
- PEL - Permissible Exposure Limit
- TWA - Time Weighted Average
- STEL - Short Term Exposure Limit
- NTP - National Toxicology Program
- IARC - International Agency for Research on Cancer

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.