

PRODUCT IDENTIFIER: Soda Ash (All Grades)

GENERAL USE: Soda ash is used in glass and detergent manufacturing, in the pulp and paper industries, for PH adjustment in water or waste water and in ion exchange resin regeneration.

PRODUCT DESCRIPTION: Sodium salt of carbonic acid.
 Synonyms for Soda Ash are Sodium Carbonate, carbonic acid, disodium salt, crystal carbonate and disodium carbonate, dense sodium carbonate.

EMERGENCY PHONE NUMBERS: (503) 599-7055 TOLL FREE (800) 242-9300

COMPOSITION AND INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS#</u>	<u>OSHA HAZARD</u>	<u>WT%</u>	<u>TLV(TWA)</u>	<u>STEL</u>	<u>PEL(TWA)</u>	<u>STEL</u>
Sodim Carbonate	497-19-8	Eye, Skin and Resiratory Irritant	99.8+	None	None	None	None

NFPA 704 HAZARD RATING: Fire=insigificant Reactivity= insignificant Health=moderate Special=No info
 Particulates not otherwise regulated: (Total dust = 15mg/m³, Respirable fraction = 5mg/m³)
 NDA = No data Available N/A = Not Applicable

HAZARDS IDENTIFICATION & EMERGENCY OVERVIEW:

A white, granular alkaline solid having no characteristic odor. Exposure to the dusts and powder may cause severe eye irritation and may cause irritation to the skin and respiratory tract. This material will react with acids and acidic materials and products to release heat and Carbon Dioxide gas.

POTENTIAL HEALTH EFFECTS:

INHALATION: Inhalation of dust may be moderately irritating to the nose, mouth, throat, lungs and Mucous membranes. Symptoms of exposure may include sneezing, coughing, choking, chest discomfort or pain and shortness of breath. Inhalation of high dust concentrations may cause lung damage.

EYE CONTACT: Exposure to the powder or dust may cause severe eye irritation. Symptoms of exposure may include tearing, redness, swelling and a painful burning sensation. Exposure is not expected to cause corneal damage or visual impairment when treated promptly.

SKIN CONTACT: Exposure to the powder or dusts may cause skin irritation. Symptoms of exposure may include redness, swelling, discomfort or pain and possibly dry cracked skin. There are no published reports Indicating this material is absorbed through the skin.

INGESTION: Ingestion may cause irritation to the entire gastrointestinal tract, including the stomach and Intestines, characterized by nausea, vomiting, abdominal pain, diarrhea and a bloated feeling.

CHRONIC: Prolonged or repeated exposure to the powder or dust can cause drying, flaking and/or cracking Of the skin. Otherwise, the chronic exposure effects are expected to be the same as for acute exposure.

FIRST AID MEASURES

INHALATION: If inhaled immediately move to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.

EYE CONTACT: In case of eye contact, immediately flush eyes with plenty of clean running water for at least 15 minutes, lifting the upper and lower lids occasionally. Remove contact lenses, if worn. Get medical attention.

SKIN CONTACT: In case of contact, flush skin with plenty of clean running water. Remove contaminated clothing and shoes and wash before reuse. If irritation occurs and persists, seek medical attention.

INGESTION: If swallowed, give plenty of water to drink. Call a physician. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: The toxicity of Soda Ash is low by ingestion but Carbon Dioxide gas will be generated and may cause gastrointestinal problems. The irritant effects of skin contact, for a prolonged period, may produce vesicular skin reactions in persons with abraded skin. Treat exposure symptomatically.

FIRE FIGHTING MEASURES

FLASH POINT AND METHOD: This material does not flash.

FLAMMABLE LIMITS: (In air, % by volume) **Lower:** N/A **Upper:** N/A **Autoignition Temp:** N/A

GENERAL HAZARD: This material is a non-combustible, inorganic, alkaline salt. The Uniform Fire Code health hazard classification for this material is: IRRITANT. It may produce hazardous dusts or hazardous decomposition products.

EXTINGUISHING MEDIA: Water, foam, CO₂ or dry chemicals. Use the extinguishing media that is appropriate for the surrounding fire.

FIRE FIGHTING EQUIPMENT: Fire fighters should wear full protective equipment, including self-contained breathing apparatus.

HAZARDOUS COMBUSTION PRODUCTS: When heated to decomposition, soda ash emits toxic carbon dioxide and sodium oxide.

ACCIDENTAL REALEASE MEASURES

LAND SPILL: Wearing recommended protective equipment and clothing, pick up the spilled material and place in approved containers for recovery, disposal or satellite accumulation. Neutralize the alkalinity of the remaining solid, using a dilute acid solution that appropriate for neutralizing alkaline solids. Liberally cover spill area with sodium bi-carbonate. Flush the spill area with water; collect the rinsates for disposal or sewer, as appropriate.

WATER SPILL: Wear recommended protective equipment and clothing if contact with hazardous material can occur. Stop or divert water flow. Dike contaminated water. Remove for disposal and/or treatment. As appropriate, notify all downstream users of possible contamination.

HANDLING & STORAGE

GENERAL: Store in a cool, dry area away from incompatible materials and products. Protect eyes, skin and clothing from contact with this material. Wear recommended personal protective equipment. Avoid breathing dusts. Use with adequate ventilation. Do not take internally. Keep the containers tightly closed when not in use. Wash thoroughly after handling this material.

STORAGE TEMPERATURE: Ambient

STORAGE PRESSURE: Ambient

EXPOSURE CONTROLS & PERSONAL PROTECTION

CONTROL MEASURES: Use a local or general, mechanical exhaust ventilation system capable of maintaining emissions, in the work area, below OSHA PEL for particulates not otherwise regulated.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR: If dust levels exceed the OSHA-PEL for Particulates Not Otherwise Regulated, wear a NIOSH approved full faceplate or half mask air-purifying cartridge respirator equipped with a good particulate cartridge or supplied air.

EYES: Wear chemical goggles (recommended by ANSI Z87.1-1979) unless a full faceplate respirator is worn.

GLOVES: Wear Nioprene, Nitrile, Butyle Rubber, or Natural Rubber gloves.

CLOTHING & EQUIPMENT: Wear Nioprene, Nitrile, Butyle Rubber, or Natural Rubber apron when handling this material.

FOOTWEAR: Wear Nioprene, Nitrile, Butyle Rubber, or Natural Rubber boots, if contact is likely.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White, granular	Bulk Density:	Between 40 and 70
Physical:	Solid	Vapor Pressure:	N/A
Odor:	No characteristic	Vapor Density:	N/A
Odor Threshold:	No data available	Evaporation Rate:	N/A
Molecular:	Na ₂ CO ₃	VOC Contact:	N/A
Molecular Weight:	105.99	% Volatile:	Nil
Boiling Point:	Decomposes	Solubility in H ₂ O:	Appreciable (33.2% max)
Freezing/Melting Point:	851° C (1,564° F)	pH (1% solution)	11.4
Specific Gravity:	2.509 @ 20°C	pH (as is):	N/A
Density (pound/gallon):	N/A	Octanol/Water Partition Coefficient:	No data Available

STABILITY AND REACTIVITY

GENERAL: This product is stable and hazardous polymerization will not occur.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIAL: Acids and acidic materials or products, Aluminum powder and alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition, soda ash emits toxic oxides of carbon and sodium.

SENSITIVITY TO MECHANICAL IMPACT: This material is not sensitive to mechanical impact.

SENSITIVITY TO STATIC DISCHARGE: This material is not sensitive to static discharge.

TOXICOLOGICAL INFORMATION

Components:	<u>Sodium Carbonate</u>
Eye Contact:	Rabbit: 100 mg/24 hours; Moderate
Skin Contact:	Rabbit: 500 mg/24 hours; Mild
Oral Rat LD:	4,090 mg/kg
Dermal Rabbit LC ₅₀ :	No data available
Inhalation Rat LC ₅₀ :	2,300 mg/m ³ /2 hours
Human Data:	No data available
Other Toxicological Data:	Inhalation Mouse LC ₅₀ : 1,200 mg/m ³ /2 hours
Carcinogenicity:	No data available
Teratogenicity:	Intrauterine Mouse TD: 84,800 ng/kg (female 4 days pregnant) Effects on Fertility - Pre-implantation mortality
Mutagenicity:	No data available
Synergistic Products:	None reported
Target Organs:	Eyes, Skin, Mucous membranes, Lungs and gastrointestinal tract
Medical Conditions	
Aggravated by exposure:	Skin, Respiratory or Gastrointestinal disorders

ECOLOGICAL INFORMATION**ENVIRONMENTAL FATE:**

This material is appreciably soluble in water and will affect the pH of water. Inorganic substances are not included in the definition of biodegradability. No specific environmental data is available.

ENVIRONMENTAL CONSIDERATIONS: The aquatic toxicity for this material is:

Daphnia Magna 96 hour LC₅₀ = 265 to 565 mg/liter. Bluegill sunfish 96 hour LC₅₀ = 300 to 320 mg/liter.

DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 CLASSIFICATION: Not Classified

U.S. EPA WASTE NUMBER/DESCRIPTION: Not Applicable

If this product is disposed of as shipped, it does not meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of a hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D due to toxicity. As a non-hazardous solid waste, it should be disposed of in accordance with all local, state and federal regulations. Consult state or local officials for proper disposal method.

TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Not Restricted

Hazard Class: Not applicable **UN Number:** Not applicable **Packing Group:** Not applicable

Primary Label: Not Required **Subsidiary Label(s):** None Required **Primary/Subsidiary Placards:** None Required

DOT Reportable Quantity (RQ): Not Listed **RQ for Product:** Not applicable **Marine Pollutant:** NO
2004 North American Emergency Responses Guidebook No. Not applicable

TDG PROPER SHIPPING NAME: Not Restricted **Hazard Class:** Not applicable

UN Number: Not applicable.

Packing Group: Not applicable **Primary Label:** Not Required **Subsidiary Label(s):** None Required

Primary/Subsidiary Placards: None Required **TDG Reportable Quantity (RQ):** Not Listed

RQ for Product: Not applicable **TDG Schedule XII:** Not listed **Regulated Limit:** Not Listed

RL for Product: Not applicable **Other Shipping Information:** None

REGULATORY INFORMATION

<p>COMPONENTS:</p> <p><u>OSHA Target Organs:</u></p>	<p><u>Sodium Carbonate</u></p> <p>Eyes, Skin, Mucous Membranes, Lungs & Gastrointestinal tract</p>	<p><u>State Regulations</u></p> <p>State of California: Safe Drinking Water and Toxins Enforcement Act of 1986 (Prop 65) Carcinogen: NO Reproductive Toxin: NO</p> <p><u>Other Regulations</u></p> <p>State Right to know Laws: None known</p>										
<p><u>Carcinogenic Potential</u></p> <p>Regulated by OSHA: Listed on NTP Report: Listed by IARC: IARC Group: ACGIH Appendix A: A1 Confirmed Human: A2 Suspected Human:</p>	<p>NO NO NO Not Applicable Not Listed Not Applicable Not Applicable</p>	<p><u>Canadian Regulations</u></p> <p>Product Information: Controlled Product: YES WHMIS Hazard Symbols: Material Causing Other Toxic Effects WHMIS Class & Division: D.2B IDL Substance: YES DSL or NDSL Lists: DSL</p>										
<p><u>U.S. EPA Requirements</u></p> <p>Release Reporting CERCLA (40 CFR 302) Listed Substance: Reportable Quantity: Category: RCRA Waste #: Unlisted Substance: Reportable Quantity: Characteristic: RCRA Waste #:</p>	<p>Not Applicable</p>	<p>OTHER INFORMATION</p> <p>EPA Registration number: Not Applicable Approved Product Uses: Not Applicable</p> <p><u>Special Notes:</u></p> <p>State of California Safe Drinking Water and Toxins Enforcement Act of 1986 (Prop 65) The following chemicals have been detected in mined materials similar to this material:</p>										
<p><u>SARA Title III</u></p> <p>Section 302 & 303 (40 CFR 355) Listed Substance: Reportable Quantity: Planning Threshold:</p> <p>Section 311 & 312 (40 CFR 370) Hazard Categories (product) Fire: Reactive: Sudden Release of Pressure: Chronic Health: Acute Health: Planning Threshold:</p> <p>Section 313 (40 CFR 372) Listed Toxic Chemical: Reporting Threshold:</p>	<p>Not Listed Not Applicable Not Applicable</p> <p>NO NO NO NO NO 10,000 pounds</p> <p>Not Listed Not Applicable</p>	<table border="0"> <thead> <tr> <th>Chemical</th> <th>Approx. amount detected</th> </tr> </thead> <tbody> <tr> <td>Arsenic (as As₂O₃)</td> <td>0.03 ppm</td> </tr> <tr> <td>Chromium (total)</td> <td>0.03 ppm</td> </tr> <tr> <td>Lead</td> <td>Less than 1 ppm</td> </tr> <tr> <td>Cadmium</td> <td>Less than 0.1 ppm</td> </tr> </tbody> </table> <p>All other listed chemicals are not detected or not suspected to be present.</p> <p><u>Special Instructions:</u></p> <p>Do not add this material to acids or acidic products except under controlled conditions, as this will liberate large volumes of carbon Dioxide gas (an asphyxiant) and a significant amount of heat.</p> <p>MSDS Revision Info: Revision made 12/13/05 MSDS Distributed by: Brenntag Pacific, Inc. NW Environmental Dept. Phone: 503-242-0200</p>	Chemical	Approx. amount detected	Arsenic (as As ₂ O ₃)	0.03 ppm	Chromium (total)	0.03 ppm	Lead	Less than 1 ppm	Cadmium	Less than 0.1 ppm
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<p><u>U.S TSCA Status</u></p> <p>Listed (40 CFR 710)</p>	<p>YES</p>	<p>The information contained herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty is expressed or implied regarding it's or accuracy, whether originating from Brenntag Pacific Inc. or an alternate source. Users of this material should satisfy themselves by independent investigation of current scientific and medical information that this material may be safely handled.</p>										