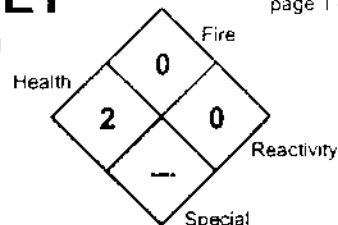


MATERIAL SAFETY DATA SHEET

BRENNTAG

NFPA 704 DESIGNATION
HAZARD RATING



4=Extreme
3=High
2=Moderate
1=Slight
0=Insignificant

Brenntag MSDS #:	BPI-18439
MSDS Revision/Issue Date:	07/28/06
Supersedes Revision Date:	08/08/01

1. CHEMICAL PRODUCT IDENTIFICATION & COMPANY IDENTIFICATION

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:	The sodium salt of carbonic acid. Synonyms for Soda Ash are Sodium Carbonate; carbonic acid, disodium salt; crystal carbonate; and disodium carbonate.		
INFORMATION PROVIDED BY:	Brenntag Pacific, Inc. 5700 N.W. Front Avenue Portland, OR 97210	EMERGENCY PHONE NUMBERS	
For MSDS call: PHONE:	503-242-0200	BRENNTAG:	503-699-7055
		CHEMTREC:	800-424-9300
		CANUTEC:	613-996-6666

2. COMPOSITION & INFORMATION ON INGREDIENTS

COMPONENT	CAS #	OSHA HAZARD	WT %	ACGIH		OSHA	
				TLV _(TWA)	STEL	PEL _(TWA)	STEL
Sodium Carbonate	497-19-8	Eye, Skin & Respiratory Irritant	99.8+	None	None	None	None

Particulates Not Otherwise Regulated:
(Total Dust = 15 mg/m³)
(Respirable Fraction = 5 mg/m³)

NDA = No Data Available N/A = Not Applicable

3. 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, mucous membranes and lungs. Symptoms of exposure may include sneezing, coughing, choking, chest discomfort or pain and shortness of breath. Inhalation of high dust concentrations may cause impairment of lung function.
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 discomfort or 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.

4. 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 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, get 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.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: This material does not flash.

Flammable Limits (In air, % by volume) **Lower:** Not applicable **Upper:** Not applicable

Autoignition Temperature: Not applicable

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.

FIRE FIGHTING INSTRUCTIONS: **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, it emits toxic carbon dioxide and sodium oxide.

6. ACCIDENTAL RELEASE 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 is appropriate for neutralizing alkaline solids. Liberally cover spill area with sodium bicarbonate. 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 and remove for disposal and/or treatment. As appropriate, notify all downstream users of possible contamination.

7. HANDLING AND STORAGE**STORAGE TEMPERATURE:** Ambient**STORAGE PRESSURE:** Ambient

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 personnel 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL MEASURES: Use a local or general, mechanical exhaust ventilation system capable of maintaining emissions, in the work area, below the 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 facepiece 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 facepiece respirator is worn.

GLOVES: Wear Neoprene, Nitrile, Butyl Rubber or Natural Rubber gloves.

CLOTHING & EQUIPMENT: Wear a Neoprene, Nitrile, Butyl Rubber or Natural Rubber apron when handling this material.

FOOTWEAR: Wear Neoprene, Nitrile, Butyl Rubber or Natural Rubber boots, if contact is likely.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White, granular	Bulk Density (pounds/m³):	Between 40 and 70
Physical State:	Solid	Vapor Pressure:	Not applicable
Odor:	No characteristic	Vapor Density (air=1):	Not applicable
Odor Threshold:	No data available	Evaporation Rate (n-Butyl Acetate=1):	Not applicable
Molecular Formula:	Na ₂ CO ₃	VOC Content:	Not applicable
Molecular Weight:	105.99	% Volatile:	Nil
Boiling Point:	Decomposes	Solubility in H₂O:	Appreciable (33.2% Maximum)
Freezing/Melting Point:	851° C. (1,564° F.)	Octanol/Water Partition Coefficient:	No data available
Specific Gravity:	2.509 @ 20° C.	pH (as is):	Not applicable
Density (pounds/gallon):	Not applicable	pH (1% solution):	11.4

10. 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 the alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition, it 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.

PRODUCT IDENTIFIER: Soda Ash (All Grades)

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11. TOXICOLOGICAL INFORMATION

Components: Sodium Carbonate
Eye Contact: Rabbit: 100 mg/24 hours; Moderate
Skin Contact: Rabbit: 500 mg/24 hours; Mild
Oral Rat LD₅₀: 4,090 mg/kg
Dermal Rabbit LD₅₀: No data available
Inhalation Rat LC₅₀: 2,300 mg/m³/2 hours
Human Data: No data available
Other Toxicological Data: Inhalation Mouse LC₅₀: 1,200 mg/m³/2 hours
Carcinogenicity: No data available
Teratogenicity: Intrauterine Mouse TD_L: 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 & Gastrointestinal tract
Medical Conditions Aggravated By Exposure: Skin, Respiratory or Gastrointestinal disorders

12. 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 fate 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.

13. 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.

14. TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Not Restricted

Hazard Class: Not applicable **UN Number:** Not applicable **Packing Group:** Not applicable
Primary Label: None 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 Response Guidebook No.: Not applicable

TDG PROPER SHIPPING NAME: NOT RESTRICTED

Hazard Class: Not applicable **UN Number:** Not applicable **Packing Group:** Not applicable
Primary Label: None Required **Subsidiary Label(s):** None Required
Primary/Subsidiary Placards: None Required

TDG Reportable Quantity (RQ):[#] Not applicable

TDG Schedule XII: Not listed

Regulated Limit (RL):^{}** Not listed

RL for Product: Not applicable

Other Shipping Information: None

[#] Canadian Transportation of Dangerous Goods Regulations (TDGR), Part IX, Table I, Quantities or levels for Immediate Reporting: releases of reportable quantities, RQ, that meet the definition of a "dangerous occurrence" (a threat to life, health, property, or the environment) must be reported to the appropriate authorities as outlined in TDGR 9.13(1) and 9.14(1).

^{**} Reporting to Environment Canada is required for any releases exceeding the regulated limits, RL, of 9.2 materials (primary or secondary). The regulated limits are found in Schedule XIII of the TDGR.

15. REGULATORY INFORMATION

COMPONENTS: Sodium Carbonate
OSHA Target Organs: Eyes, Skin, Mucous membranes, Lungs & Gastrointestinal tract

Carcinogenic Potential:

Regulated by OSHA: No
Listed on NTP Report: No
Listed by IARC: No
 IARC Group: Not applicable
ACGIH Appendix A: Not listed
 A1 Confirmed Human: Not applicable
 A2 Suspected Human: Not applicable

U.S. EPA Requirements**Release Reporting****CERCLA (40 CFR 302)**

Listed Substance: Not listed
Reportable Quantity: Not applicable
Category: Not applicable
RCRA Waste No.: Not applicable

Unlisted Substance: Not applicable
Reportable Quantity: Not applicable
Characteristic: Not applicable
RCRA Waste No.: Not applicable

SARA TITLE III**Section 302 & 303 (40 CFR 355):**

Listed Substance: Not listed
Reportable Quantity: Not applicable
Planning Threshold: Not applicable

Section 311 & 312 (40 CFR 370):

Hazard Categories (product): Fire: N Sudden Release of Pressure: N Reactive: N Acute Health: Y Chronic Health: N
Planning threshold: 10,000 pounds

Section 313 (40 CFR 372):

Listed Toxic Chemical: Not listed
Reporting Threshold: Not applicable

U.S. TSCA Status

Listed (40 CFR 710): Yes

State Regulations**State of California: Safe Drinking Water and Toxins Enforcement Act, 1986 (Proposition 65):**

Carcinogen: No
Reproductive Toxin: No

Other Regulations

State Right To Know Laws: None known

Canadian Regulations**Product Information:**

Controlled Product: Yes
WHMIS Hazard Symbols: Material Causing Other Toxic Effects
WHMIS Class & Division: D.2B

Ingredient Information:

IDL Substance: Yes
DSL or NDSL Lists: DSL

PRODUCT IDENTIFIER: Soda Ash (All Grades)

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16 OTHER INFORMATION

EPA Registration number: Not applicable

Approved Product Uses: Not applicable

Special Notes:

State of California Safe Drinking Water and Toxins Enforcement Act, 1986 (Proposition 65): The following chemicals have been detected in mined material similar to this material.

Chemical	Approximate 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

All other listed chemicals are not detected or not suspected to be present.

Special Instructions:

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.

MSDS Revision Information: Information Revised This Issue Date: Updated per new ownership and Information.
Form Revision made 12/13/05

MSDS Distributed by: Brenntag Pacific, Inc.
NW Environmental Department
Phone: 503-242-0200 FAX: 503-412-3390

Prepared By: Edward Doheny **Date Prepared:** July 28, 2006

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