

Univar USA Inc. 6100 Carillon Point Kirkland, WA 98033 (425) 889-3400

For Emergency Assistance involving chemicals call - CHEMTREC (800) 424-9300

The Version Date for this MSDS is : 11/13/2002

PRODUCT NAME: SODIUM CARBONATE / SODA ASH

MSDS NUMBER: FZ000018

EFFECTIVE DATE: 09/10/1998

07/18/1996 SUPERSEDES:

ISSUED BY: 008418

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

DISTRIBUTED BY UNIVAR USA INC.

6100 CARILLON POINT KIRKLAND, WA 98033

425 889-3400

PRODUCT NAME: Sodium Carbonate, Anhydrous

SYNONYM(s): Soda Ash, Sodium Carbonate Anhydrous

GENERAL USE: Glass manufacture, detergent manufacture, sodium chemicals and carbonate chemicals manufacture, pulp and paper, brine treatment, water hardness removal, pH adjustment in water or waste water, flue gas desulfurization, coal treatment, ion exchange resin regeneration. This chemical is certified to ANSI/NSF Standard 60, Drinking Water

Chemicals-Health Effects. The maximum dosage level for this chemical is 150 mq/L.

Emergency Telephone Numbers: CHEMTREC (800) 424-9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS # 497-19-8 Chemical Name Wt.8 Sodium carbonate 99.8

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: White, granular solid. Product is non-combustible. Reacts with acids to release carbon dioxide gas and heat. Irritating to the eyes. Continuous contact may irritate skin.

POTENTIAL HEALTH EFFECTS: Direct contact with the product causes irritation of the eyes and continuous contact may cause skin irritation (red, dry, cracked skin). Excessive levels of airborne dust may irritate the mucous membranes and upper respiratory tract.

4. FIRST AID MEASURES

EYES: Immediately flush with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. See a medical doctor or ophthalmologist immediately.

SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

INGESTION: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.

NOTES TO MEDICAL DOCTOR: While internal toxicity is low, irritant effects of high concentrations may produce corneal opacities, and vesicular skin reactions in humans with abraded skin only. Treatment is symptomatic and supportive.

5. FIRE FIGHTING MEASURES

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA: Water, water fog, carbon dioxide (CO2), dry chemical HAZARDOUS COMBUSTION PRODUCTS: Fumes of sodium oxide.

EXPLOSION HAZARDS: Not applicable

FIRE FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus.

AUTOIGNITION TEMPERATURE: Not applicable

PROPERTIES CONTRIBUTING TO FLAMMABILITY: Not applicable

FLASH POINT: Non-combustible

SENSITIVITY TO STATIC DISCHARGE: None

SENSITIVITY TO IMPACT: None

HAZARDOUS DECOMPOSITION PRODUCTS: Heated to decomposition, it emits fumes of sodium oxide.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Sweep up and recycle into process if contamination does not present a problem. Use appropriate protective equipment if dust is generated or contact with eyes or skin is expected. Flush residues and liquid to holding area for neutralization before discharge.

7. HANDLING AND STORAGE

HANDLING: Use air conveying/mechanical systems for bulk transfer to storage. For manual handling of bulk transfer use mechanical ventilation to remove airborne dust from railcar, ship or truck. Use approved respiratory protection when ventilation systems are not available. Selection of respirators is based on the dust cloud generated.

STORAGE: Store in a cool dry area, away from acids.

COMMENTS: Provide general mechanical and/or local exhaust ventilation to prevent release of airborne dust into the work environment. Approved

respiratory protection should be used when airborne dust is expected to be released.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Minimize eye and skin contact by using appropriate protective equipment. Use local or general room ventilation to control airborne dust that may be generated into the work environment. PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use cup type chemical goggles.

RESPIRATORY: Use approved dust respirator for low levels of airborne dust.

High concentrations may require air supplied systems.

PROTECTIVE CLOTHING: Use impervious gloves to prevent skin contact, arm protectors and aprons. If clothing becomes contaminated, remove and launder before reuse. Industrial safety shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Odorless

APPEARANCE: White, granular solid.

pH: (1% solution): 11.4

PERCENT VOLATILE: Not applicable VAPOR PRESSURE: Not applicable VAPOR DENSITY: Not Applicable BOILING POINT: Decomposes FREEZING POINT: 851 C (1564 F) SOLUBILITY IN WATER: 33.2 % maximum EVAPORATION RATE: (Butyl Acetate = 1) Not applicable

DENSITY: Dense Grades = 0.86 - 1.12; Light Grades = 0.70 - 0.90

SPECIFIC GRAVITY: 2.509 (water = 1) COEFF. OIL/WATER: Not applicable ODOR THRESHOLD: Not applicable OXIDIZING PROPERTIES: Not applicable

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Contact with acids except under controlled conditions. STABILITY: Stable

POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: None

INCOMPATIBLE MATERIALS: Reacts with acids with release of large volumes of carbon dioxide gas and heat.

COMMENTS: Materials to Avoid: Aluminum powder, acids, fluorine, molten lithium

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Severe irritant (rabbit) Toxicology 23:281 (1982) SKIN EFFECTS: Non-irritating to intact skin. Minor irritation may occur on abraded skin.

Toxicol. Appl. Pharmacol. 31:481 (1975)

DERMAL LD50: No data available for the product.

ORAL LD50: 4090 mg/kg (rat) RTECS 1986

INHALATION LC50: 2.3 mg/L (rat, 2 hr) Environ, Res. 31:138 (1983)

SENSITIZATION: Non-sensitizing (humans, 0.25% sodium carbonate) Toxicol.

Appl. Pharmacol. 31:481 (1975)

TARGET ORGANS: Eyes

ACUTE EFFECTS FROM OVEREXPOSURE: May cause severe irritation of the eyes, including corneal opacities. Dusts and mists may be irritating to the skin,

mucous membranes and upper respiratory tract.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the product.

CARCINOGENICITY: IARC: Not listed NTP: Not listed OSHA: Not listed

OTHER: (ACGIH) Not listed

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Daphnia Magna 96 hr LC50 = 265 - 565 mg/L Bluegill Sunfish 96 hr LC50 = 300 - 320 mg/LCHEMICAL FATE INFORMATION: Biodegradability does not apply to inorganic substances.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Salvage as much material as possible and return to process if contamination does not present a problem. Dispose in an accepted landfill in accordance with accepted governmental regulations.

14. TRANSPORT INFORMATION

U.S. DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated

PRIMARY HAZARD CLASS/DIVISION: Not applicable

UN/NA NUMBER: None

PLACARDS: Not applicable LABEL: Not applicable OTHER SHIPPING INFORMATION: DOT Marking: Not applicable

Hazardous Substance/RQ: Not applicable

49 STCC Number: Not applicable

SPECIAL SHIPPING NOTES: IMDG: Not regulated

IATA: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 311 HAZARD CATEGORY (40 CFR 370):

Immediate (Acute) Health Hazard

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370): 10000 lbs.

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372): Not listed

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): Not listed

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA REGULATORY (40 CFR 302.4): Not applicable

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS (40 CFR 710): Listed

CANADA

WHMIS (WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM): Product

Identification Number: Not applicable

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Hazard Classification: Toxic, Class D, Div. 2, Subdiv. B
Ingredient Disclosure List: Listed
16. OTHER INFORMATION
HMIS RATING
HEALTH: 2
FLAMMABILITY 0
REACTIVITY: 0
PROTECTION: J
NFPA RATING
HEALTH: 2
FLAMMABILITY 0
REACTIVITY: 0
SPECIAL: None
Key
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal
HMIS RATINGS NOTES:
Protection = J (Safety goggles, gloves, apron & combination dust & vapor
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The contents and format of this MSDS are in accordance with OSHA Hazard Communication Standard and Canada's Workplace Hazardous Information System

For Additional Information:

Contact: MSDS Coordinator - Univar USA

During business hours, Pacific Time - (425) 889-3400

National Fire Protection Association (NFPA) Hazardous Materials Identification System (HMIS)

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END OF MSDS