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GR0255

REPORT NUMBER: 703 VAN WATERS & ROGERS INC.
MSDS NO: FZ000018 MATERIAL SAFETY DATA SHEET
MAINFRAME UPLOAD DATE: 01/08/01

PAGE: 001

VERSION: 002

PRG T: SODIUM CARBONATE / SODA ASH

ORDER NO: 163960

PROD NO : 681438

GENERAL COLOR & CHEM
BRIDGE STREET
ATTN CERAMIC DIV BLD 2

MINERVA ,OH 44657

VAN WATERS & ROGERS INC. , A ROYAL VOPAK COMPANY (425)889-3400
6100 CARILLON POINT , KIRKLAND , WA 98033

----- EMERGENCY ASSISTANCE -----

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL - CHEMTREC
(800)424-9300

PRODUCT NAME: SODIUM CARBONATE / SODA ASH

MSDS NUMBER: FZ000018

EFFECTIVE DATE: 9/10/1998

SUPERSEDES: 7/18/1996

ISSUED BY: 008418

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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 mg/L.

Emergency Telephone Numbers:

CHEMTREC (800) 424-9300

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2. COMPOSITION / INFORMATION ON INGREDIENTS

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

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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 air borne 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

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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)
EFF. OIL/WATER: Not applicable
CORROSION THRESHOLD: Not applicable
STABILIZING PROPERTIES: Not applicable

4. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Contact with acids except under controlled conditions.
STABILITY: Stable
POLYMERIZATION: Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS: None
COMPATIBLE MATERIALS: Reacts with acids with release of large volumes of carbon dioxide gas and heat.
MATERIALS TO AVOID: Materials to Avoid : Aluminum powder, acids, fluorine, molten sodium

5. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS: Severe irritant (rabbit) (Toxicology 23:281 (1982))
SKIN EFFECTS: Non-irritating to intact skin. Minor irritation may occur on abraded skin.
TOXICOLOGICAL: Appl. Pharmacol. 31:481 (1975)
ACUTE LD50: No data available for the product.
48H 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
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:
RAT: Not listed
MICE: Not listed
RATS: Not listed
HUMANS: (ACGIH) Not listed

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. ECOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Daphnia Magna 96 hr LC50 = 265 - 565 mg/L

Regill Sunfish 96 hr LC50 = 300 - 320 mg/L

CHEMICAL FATE INFORMATION: Biodegradability does not apply to inorganic substances.

. DISPOSAL CONSIDERATIONS

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

TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

DOT SHIPPING NAME: Not regulated

DOT HAZARD CLASS/DIVISION: Not applicable

DOT NUMBER: None

DOT CARDS: Not applicable

DOT LABEL: Not applicable

DOT SHIPPING INFORMATION:

DOT Marking: Not applicable

DOT Hazardous Substance/RQ: Not applicable

DOT STCC Number: Not applicable

DOT SPECIAL SHIPPING NOTES: IMDG: Not regulated

DOT A: Not regulated

REGULATORY INFORMATION

UNITED STATES

A 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

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

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT) REGULATORY (40 CFR 302.4): Not applicable

DOT (TOXIC SUBSTANCE CONTROL ACT)

DOT STATUS (40 CFR 710): Listed

DOT A

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MIS (WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM): Product

Identification Number: Not applicable

Hazard Classification: Toxic, Class D, Div. 2, Subdiv. B

Ingredient Disclosure List: Listed

OTHER INFORMATION

IS RATING

ALTH: 2

FLAMMABILITY: 0

ACTIVITY: 0

PROTECTION: J

HA RATING

ALTH: 2

FLAMMABILITY: 0

ACTIVITY: 0

EFFECT: None

- /
- = Severe
- = Serious
- = Moderate
- = Slight
- = Minimal

IS RATINGS NOTES:

Protection = J (Safety goggles, gloves, apron & combination dust & vapor respirator)

The contents and format of this MSDS are in accordance with OSHA Hazard Communication Standard and Canada's Workplace Hazardous Information System (WHMIS).

National Fire Protection Association (NFPA)

Hazardous Materials Identification System (HMIS)

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----- FOR ADDITIONAL INFORMATION -----

CONTACT: MSDS COORDINATOR VAN WATERS & ROGERS INC.
DURING BUSINESS HOURS, PACIFIC TIME (425)889-3400

02/07/01 13:01 PRODUCT: 681438 CUST NO: 157888 ORDER NO: 163960

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