

ALGINATE BONDOR

REPORT NUMBER: 703
MSDS NO: P1127
MAINFRAME UPLOAD DATE: 01/10/91

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 001
VERSION: 007

PRODUCT: SODIUM CARBONATE

ORDER NO: 629755
PROD NO : 628695

TRI ESS SCIENCES INC
1020 WEST CHESTNUT ST

BURBANK , CA 91506

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

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

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

----- PRODUCT IDENTIFICATION -----

PRODUCT NAME: SODIUM CARBONATE CAS NO.: 5968-11-6 (MONOHYDRATE)
497-19-8 (ANHYDROUS)
6132-02-1 (DECAHYDRATE)

COMMON NAMES/SYNONYMS: DISODIUM CARBONATE; SODA ASH MSDS #: P1127
CONSAL; SODIUM CARBONATE DECAHYDRATE

FORMULA: Na_2CO_3 ; $Na_2CO_3 \cdot 10H_2O$ (DECAHYDRATE) DATE ISSUED: 01/91

MOLECULAR WEIGHT: 105.99; 286 DECAHYDRATE SUPERCEDES: 10/90

NFPA RATING (MANUFACTURER)

HMIS RATING

HEALTH: 2
FIRE: 0
REACTIVITY: 0

HAZARD RATING SCALE
0=MINIMAL 3=SERIOUS
1=SLIGHT 4=SEVERE

HEALTH: 1
FIRE: 0
REACTIVITY: 0

SPECIAL: NONE

2=MODERATE

----- HAZARDOUS INGREDIENTS -----

EXPOSURE LIMITS, PPM
OSHA ACGIH OTHER

REPORT NUMBER: 703

MSDS NO: P1127

MAINFRAME UPLOAD DATE: 01/10/91

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 002

VERSION: 007

PRODUCT: SODIUM CARBONATE

ORDER NO: 629755

PROD NO : 628695

SODIUM CARBONATE (497-19-8) >99 NONE NONE NONE IRRITANT

NOTE: SYNONYM FOR CONSAL IS SODIUM CARBONATE DECAHYDRATE

-----PHYSICAL PROPERTIES-----

BOILING POINT, DEG F: DECOMPOSES

MELTING POINT, DEG F: 1564

SPECIFIC GRAVITY (WATER=1): 2.25 - 2.53; 1.44 (DECAHYDRATE)

VAPOR PRESSURE, MM HG: NOT APPLICABLE

pH: 11.3 (1% SOLUTION)

VAPOR DENSITY (AIR=1): NOT APPLICABLE

WATER SOLUBILITY %: 33.2% WT

EVAPORATION RATE (BUTYL ACETATE = 1): NOT APPLICABLE

% VOLATILE (BY VOLUME): NOT APPLICABLE

APPEARANCE AND ODOR: WHITE ODORLESS POWDER OR GRANULES.

-----FIRST AID MEASURES-----

IF INHALED: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET IMMEDIATE MEDICAL ATTENTION.

IN CASE OF EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LOTS OF RUNNING WATER FOR 15 MINUTES, LIFTING THE UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION.

IN CASE OF SKIN CONTACT: IMMEDIATELY WASH SKIN WITH LOTS OF SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES; WASH BEFORE REUSE. GET MEDICAL ATTENTION IF IRRITATION PERSISTS AFTER WASHING.

IF SWALLOWED: DO NOT INDUCE VOMITING. IF CONSCIOUS, GIVE LOTS OF WATER OR MILK. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

NOTES TO PHYSICIAN: NONE

-----HEALTH HAZARD INFORMATION-----

PRIMARY ROUTES OF EXPOSURE: INHALATION, SKIN OR EYE CONTACT.

REPORT NUMBER: 703
MSDS NO: P1127
MAINFRAME UPLOAD DATE: 01/10/91

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 003
VERSION: 007

PRODUCT: SODIUM CARBONATE

ORDER NO: 629755
PROD NO : 628695

INHALATION: BREATHING DUST MAY IRRITATE THE NOSE AND THROAT AND CAUSE COUGHING AND CHEST DISCOMFORT. EXCESSIVE CONTACT CAN CAUSE DAMAGE TO THE NASAL SEPTUM.

EYE CONTACT: DUSTS WILL IRRITATE THE EYES AND PROLONGED CONTACT MAY DAMAGE THE EYES.

SKIN CONTACT: PROLONGED OR REPEATED CONTACT WITH THE DUST MAY IRRITATE THE SKIN WITH BLISTERING AND REDNESS, SOLUTIONS MAY CAUSE SEVERE IRRITATION OR BURNS.

SWALLOWED: SWALLOWING LARGE QUANTITIES MAY CAUSE NAUSEA, VOMITING, ABDOMINAL PAIN, DIARRHEA AND COLLAPSE.

CHRONIC EFFECTS OF EXPOSURE: MAY CAUSE SENSITIZATION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE REPORTED.

-----TOXICITY DATA-----

ORAL: RATS LD50 = 4 G/KG

DERMAL: RABBITS 500 MG/24 HR; MODERATE IRRITATION

INHALATION: NO DATA FOUND

CARCINOGENICITY: THIS MATERIAL IS NOT CONSIDERED TO BE A CARCINOGEN BY THE NATIONAL TOXICOLOGY PROGRAM, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER, OR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OTHER DATA: NONE

-----ECOLOGICAL INFORMATION SECTION-----

NO DATA FOUND

-----PERSONAL PROTECTION-----

VENTILATION: LOCAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MAINTAINING DUST EMISSIONS AT THE POINT OF USE.

RESPIRATORY PROTECTION: IF USE CONDITIONS GENERATE DUSTS, WEAR A NIOSH-APPROVED RESPIRATOR APPROPRIATE FOR THOSE EMISSION LEVELS. APPROPRIATE RESPIRATORS MAY BE A FULL FACEPIECE OR A HALF MASK AIR-PURIFYING CARTRIDGE RESPIRATOR WITH PARTICULATE FILTERS. A SELF-CONTAINED BREATHING

REPORT NUMBER: 703

MSDS NO: P1127

MAINFRAME UPLOAD DATE: 01/10/91

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 004

VERSION: 007

PRODUCT: SODIUM CARBONATE

ORDER NO: 629755
PROD NO : 628695

EYE PROTECTION: CHEMICAL GOGGLES AND FULL FACE SHIELD. IT IS GENERALLY
RECOGNIZED THAT CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH
CHEMICALS BECAUSE CONTACT LENSES MAY CONTRIBUTE TO THE SEVERITY OF AN
EYE INJURY.

PROTECTIVE CLOTHING: LONG-SLEEVED SHIRT, TROUSERS, SAFETY SHOES, RUBBER
GLOVES, AND RUBBER APRON.

OTHER PROTECTIVE MEASURES: AN EYEWASH AND SAFETY SHOWER SHOULD BE
NEARBY AND READY FOR USE.

-----FIRE AND EXPLOSION INFORMATION-----

FLASH POINT, DEG F: N/A
METHOD USED: N/A

FLAMMABLE LIMITS IN AIR, %
LOWER: N/A UPPER: N/A

AUTOIGNITION TEMPERATURE, DEG. F: NO DATA FOUND

EXTINGUISHING MEDIA: USE WATER SPRAY, DRY CHEMICAL, CO2, OR ALCOHOL
FOAM.

SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR SELF-
CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. USE WATER
SPRAY TO COOL NEARBY CONTAINERS AND STRUCTURES EXPOSED TO FIRE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: EXTINGUISH ALL NEARBY SOURCES OF
IGNITION.

-----HAZARDOUS REACTIVITY-----

STABILITY: STABLE

POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: EXCESSIVE HEAT AND CONTAMINATION OF ANY KIND.

MATERIALS TO AVOID: ACIDS, OXIDES OF PHOSPHOROUS, ZINC, LITHIUM, FLUORINE,
CALCIUM HYDROXIDE, ALUMINUM AND 2,4,6-TRINITROTOLUENE. CONTACT WITH ACIDS
WILL RELEASE CARBON DIOXIDE GAS. WHEN MIXED WITH LIME DUST AND WATER,
CORROSIVE CAUSTIC SODA MAY BE PRODUCED.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY LIBERATE CARBON MONOXIDE OR
CARBON DIOXIDE AND OXIDES OF SODIUM.

-----SPILL, LEAK, AND DISPOSAL PROCEDURES-----

ACTION TO TAKE FOR SPILLS OR LEAKS: WEAR PROTECTIVE EQUIPMENT INCLUDING

REPORT NUMBER: 703

MSDS NO: P1127

MAINFRAME UPLOAD DATE: 01/10/91

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 00

VERSION: 00

PRODUCT: SODIUM CARBONATE

ORDER NO: 629755

PROD NO : 628695

RESPIRATOR. IF THE SPILL OR LEAK IS SMALL, A FULL FACEPIECE AIR-PURIFYING CARTRIDGE RESPIRATOR EQUIPPED WITH PARTICULATE FILTERS MAY BE SATISFACTORY. IN ANY EVENT, ALWAYS WEAR EYE PROTECTION. FOR SMALL SPILLS, SWEEP UP AND DISPOSE OF IN DOT-APPROVED WASTE CONTAINERS. FOR LARGE SPILLS, SHOVEL INTO DOT-APPROVED WASTE CONTAINERS. KEEP OUT OF SEWERS, STORM DRAINS, SURFACE WATERS, AND SOIL. COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS ON SPILL REPORTING, AND HANDLING AND DISPOSAL OF WASTE.

DISPOSAL METHODS: DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES.

NOTE: EMPTY CONTAINERS CAN HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

-----SPECIAL PRECAUTIONS-----

STORAGE AND HANDLING PRECAUTIONS: STORE IN A COOL, DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. KEEP BAGS OR FIBER DRUMS DRY AT ALL TIMES. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. AVOID EYE CONTACT OR PROLONGED SKIN CONTACT. AVOID BREATHING DUST. WHEN DISSOLVING, ADD TO WATER CAUTIOUSLY AND WITH STIRRING; SOLUTIONS CAN GET HOT.

REPAIR AND MAINTENANCE PRECAUTIONS: NONE.

OTHER PRECAUTIONS: CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL. AVOID SIMULTANEOUS EXPOSURE TO SODA ASH AND LIME DUST. IN THE PRESENCE OF MOISTURE THE TWO MATERIALS COMBINE TO FORM CAUSTIC SODA (NaOH), WHICH MAY CAUSE BURNS.

-----OTHER REGULATORY INFORMATION-----

SECTION 313: NONE

PROPOSITION 65: SEE BELOW

SECTION 313 & PROP. 65: SEE BELOW

SECTION 313 (WITH CHEMICALS LISTED): NONE

PROPOSITION 65 (WITH CHEMICALS LISTED): THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) CONSIDERED BY THE STATE OF CALIFORNIA'S SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROPOSITION 65) AS CAUSING CANCER OR REPRODUCTIVE TOXICITY AND FOR WHICH WARNINGS ARE NOW REQUIRED: