



REPORT NUMBER: 971
MSDS NO: P15941V
MAINFRAME UPLOAD DATE: 06/01/96

PAGE: 001

VERSION: 003

PRODUCT: SODIUM FLUORIDE

ORDER NO:

PROD NO :

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

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

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

PRODUCT IDENTIFICATION/INFORMATION

PRODUCT NAME: SODIUM FLUORIDE

MSDS NUMBER: P15941V

DATE ISSUED: 5/9/96

ISSUED BY: 005351

SECTION I PRODUCT DESCRIPTION

PRODUCT NAME: SODIUM FLUORIDE, COARSE

SYNONYMS: SODIUM FLUORIDE; SODIUM MONOFLUORIDE

CHEMICAL FAMILY: INORGANIC SALT

CHEMICAL FORMULA: NaF

HEALTH = 3 REACTIVITY = 0

FIRE = 0 EQUIPMENT-

HAZARD RATINGS:

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0 = LEAST
2 = MODERATE
4 = EXTREME
1 = SLIGHT
3 = HIGH

SECTION II PRODUCT COMPOSITION

INGREDIENT	%	CAS#	TLV
SODIUM FLUORIDE	97-100	7681-49-4	2.5 MG(F)/M3
SODIUM SILICOFLUORIDE	0-2.5	16893-85-9	2.5 MG(F)/M3

SECTION III PHYSICAL PROPERTIES

BOILING RANGE: 1704 C / 3099 F

SPECIFIC GRAVITY (WATER=1): NOT APPLICABLE

BULK DENSITY: 2.56 G/CC @ 41 C

VAPOR PRESSURE AT 20C (MM OF HG): NOT APPLICABLE

VAPOR DENSITY (AIR=1): NOT APPLICABLE

SOLUBILITY IN WATER: 4% @ 25 C

EVAPORATION RATE: NOT APPLICABLE

% VOLATILES: NOT APPLICABLE

APPEARANCE AND ODOR: WHITE GRANULAR SOLID; LITTLE OR NO ODOR.

SECTION IV FIRE AND EXPLOSION DATA

LOWER FLAMMABILITY LIMITS (% IN AIR): NOT FLAMMABLE

FLASH POINT (AND METHOD): NOT FLAMMABLE

THRESHOLD LIMIT VALUE: TWA= 2.5 MG(F)/M3
ACUTE TOXICITY: LD50 (ORAL-RAT) 180 MG/KG
MAXIMUM USE FOR FLUORIDATION 2.3 MG/L

FLAMMABILITY CLASSIFICATION: NOT FLAMMABLE

RECOMMENDED EXTINGUISHING MEDIA: DOES NOT BURN OR SUPPORT COMBUSTION.
USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING MATERIALS.

SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD BE EQUIPPED WITH

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APPROPRIATE PROTECTIVE APPAREL AND A NIOSH-APPROVED RESPIRATOR. USE WATER TO COOL CONTAINERS EXPOSED TO FIRE.

UNUSUAL FIRE/EXPLOSION HAZARDS: THERMAL DECOMPOSITION MAY RELEASE HAZARDOUS FUMES OF HYDROGEN FLUORIDE AND SODIUM OXIDES.

SECTION V HEALTH INFORMATION

OSHA PEL: TWA= 2.5 MG(F)/M3

EFFECTS OF OVEREXPOSURE: INHALATION MAY CAUSE SEVERE MUCOUS MEMBRANE IRRITATION WITH COUGHING, SORE THROAT, SHORTNESS OF BREATH AND LABORED BREATHING. REPEATED EXPOSURE TO EXCESSIVE CONCENTRATIONS OF FLUORIDE OVER A PERIOD OF YEARS RESULTS IN INCREASED DENSITY OF BONE AND EVENTUALLY MAY CAUSE CRIPPLING FLUOROSIS. DUSTS MAY CAUSE IRRITATION TO THE SKIN WITH REDNESS AND PAIN. SODIUM FLUORIDE IS CORROSIVE WHEN IN AN AQUEOUS SOLUTION AND MAY CAUSE SEVERE BURNS. CONTACT WITH EYES MAY CAUSE SEVERE IRRITATION, REDNESS, PAIN AND BLURRED VISION. INGESTION MAY CAUSE CORROSION OF THE GASTRIC MUCOSA, NAUSEA, VOMITING, DIARRHEA, ABDOMINAL PAIN AND THIRST. SERIOUS POISONING MAY INCLUDE WEAKNESS, TREMORS, CONVULSIONS, COLLAPSE, LOW BLOOD CALCIUM LEVELS AND COMA. DEATH IS DUE TO CARDIOVASCULAR COLLAPSE, RESPIRATORY FAILURE OR VENTRICULAR FIBRILLATION. REPEATED EXPOSURE MAY CAUSE FLUOROSIS. SYMPTOMS INCLUDE WEIGHT LOSS, BRITTLENESS OF BONES, ANEMIA, WEAKNESS, STIFFNESS OF JOINTS, MOTTLING OF TOOTH ENAMEL AND OSTEOSCLEROSIS.

EMERGENCY FIRST AID PROCEDURES:

EYE CONTACT: FLUSH WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH EXPOSED AREAS WITH SOAP AND WATER. GET MEDICAL ATTENTION.

INHALATION: REMOVE PERSON FROM CONTAMINATED AREA TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION.

INGESTION: IF CONSCIOUS, DRINK LARGE QUANTITIES OF WATER, 1% CALCIUM CHLORIDE SOLUTION OR CALCIUM GLUCONATE. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY!

LISTED IN THE FOLLOWING:

-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER MONOGRAPHS (IARC)	NO
-NATIONAL TOXICOLOGY PROGRAM ANNUAL REPORT ON CARCINOGENS (NTP)	NO
-OSHA SUBPART Z	NO
-MASSACHUSETTS RIGHT TO KNOW LAWS	YES
-NEW JERSEY RIGHT TO KNOW LAWS	YES
-COMPREHENSIVE ENV. RESPONSE, COMPENSATION & LIABILITY ACT (CERCLA)	YES
-RESOURCE CONSERVATION & RECOVERY ACT (RCRA)	NO
-SARA 302 EXTREMELY HAZARDOUS SUBSTANCES	NO

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--- WARNING: THIS PRODUCT CONTAINS DETECTABLE AMOUNTS OF A CHEMICAL KNOWN
--- TO THE STATE OF CALIFORNIA TO CAUSE CANCER/BIRTH DEFECTS OR OTHER
--- REPRODUCTIVE HARM.

SECTION VI REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: WHEN DISSOLVED IN WATER, SODIUM FLUORIDE FORMS A
CORROSIVE SOLUTION WHICH MAY ATTACK GLASS OR ALUMINUM.

INCOMPATIBILITY WITH OTHER MATERIALS: ACIDS, GLASS, ALUMINUM.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY RELEASE
HAZARDOUS FUMES OF HYDROGEN FLUORIDE AND SODIUM OXIDES.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VII SPILL OR LEAK PROCEDURES

PROCEDURES IF MATERIAL IS SPILLED OR RELEASED: SWEEP OR SHOVEL UP AND PLACE
INTO CONTAINERS FOR DISPOSAL. FLUSH SPILL AREA WITH PLENTY OF WATER. WEAR
PROTECTIVE CLOTHING AND APPROVED RESPIRATOR WHEN CLEANING UP SPILLS.

WASTE DISPOSAL PROCEDURES: FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: A NIOSH-APPROVED RESPIRATOR FOR DUST OR MIST

LOCAL EXHAUST: RECOMMENDED

PROTECTIVE GLOVES: RUBBER

EYE PROTECTION: CHEMICAL SAFETY GLASSES

OTHER PROTECTIVE EQUIPMENT: PROTECTIVE CLOTHING; EYE-WASH; SAFETY SHOWER

SECTION IX ADDITIONAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

USE ONLY WITH ADEQUATE VENTILATION.

AVOID BREATHING DUSTS OR MISTS.

DO NOT SWALLOW MATERIAL.

WASH THOROUGHLY AFTER HANDLING.

KEEP BAG OR CONTAINER CLOSED WHEN NOT IN USE.

STORE IN A COOL, DRY AREA.

AVOID CONTACT WITH GLASS, METALS AND OTHER INCOMPATIBLE MATERIALS.

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SECTION X TRANSPORTATION REQUIREMENTS

DOT PROPER SHIPPING NAME: SODIUM FLUORIDE

DOT HAZARD CLASS: 6.1

PACKAGING GROUP: III

REPORTABLE QUANTITY: 1000 LB

UN/NA IDENTIFICATION NUMBER: UN 1690

DOT LABELS REQUIRED: KEEP AWAY FROM FOOD

DOT PLACARDS REQUIRED: KEEP AWAY FROM FOOD

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

CONTACT: MSDS COORDINATOR

VAN WATERS & ROGERS INC.

DURING BUSINESS HOURS, PACIFIC TIME

(425)889-3400

02/26/98 08:44

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----- NOTICE -----

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