

ANACHEMIA CANADA -- SODIUM HYDROXIDE, >5-10% W/V, R-5200F -- 6810-00-985-7093

===== Product Identification =====

Product ID:SODIUM HYDROXIDE, >5-10% W/V, R-5200F

MSDS Date:12/03/1999

FSC:6810

NIIN:00-985-7093

Status Code:A

MSDS Number: CKYHR

=== Responsible Party ===

Company Name:ANACHEMIA CANADA

Address:255 NORMAN H8R 1A3

City:VILLE ST. PIERRE (MONTREAL)

State:PQ

Country:CN

Info Phone Num:514-4

89-5711

Emergency Phone Num:613-996-6666/518-297-4444

Preparer's Name:MSDS DEPT / DEPT DE F.S.

Chemtrec Ind/Phone:(800)424-9300

CAGE:36842

=== Contractor Identification ===

Company Name:ANACHEMIA CANADA

Address:255 NORMAN H8R 1A3

Box:City:VILLE ST. PIERRE (MONTREAL)

State:PQ

Country:CN

Phone:514-489-5711;518-297-4444

CAGE:36842

Company Name:ANACHEMIA CHEMICALS INC

Address:3 LINCOLN BLVD

Box:City:ROUSES POINT

State:NY

ZIP:12979

Country:US

Phone:518-297-4444

CAGE:4A444

===== Composition

/Information on Ingredients =====

Ingred Name:SODIUM HYDROXIDE

CAS:1310-73-2

RTECS #:WB4900000

Fraction by Wt: >5-10% W/V

ACGIH TLV:2 MG/M3 (CEILING)

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Fraction by Wt: BALANCE

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50: ACUTE: 140 - 340 MG/KG (RAT)

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO

IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EFFECTS OF ACUTE EXPOSURE: HARMFUL BY INGESTION, INHALATION OR SKIN ABSORPTION. VERY CORROSIVE. ACUTE EFFECTS MAY BE DELAYED. TARGET ORGANS: EYES, SKIN, RESPIRATORY SYSTEM. EYE: EXTREMELY CORROSIVE. CAUSES SEVERE BURNS AND LOSS OF VISION. CAUSES CORNEAL SCARRING AND CLOUDING. GLAUCOMA, CATARACTS AND PERMANENT BLINDNESS MAY OCCUR. SKIN: VERY CORROSIVE! LIQUID IS EXTREMELY CORROSIVE TO THE SKIN AND RAPIDLY CAUSES SEVERE CHEMICAL

BURNS. CAUSES DEEP AND SEVERE BURNS, ULCERATION AND SCARRING. CAUSES BURNS WHICH MAY BE DELAYED. INHALATION: MATERIAL IS EXTREMELY DESTRUCTIVE TO THE TISSUE OF THE MUCOUS (SIGNS AND SYMPTOMS OF OVEREXPOSURE)

Explanation of Carcinogenicity:SODIUM HYDROXIDE HAS BEEN IMPLICATED AS A CAUSE OF CANCER OF THE ESOPHAGUS IN INDIVIDUALS WHO HAVE INGESTED IT. THE CANCER MAY DEVELOP 12 TO 42 YEARS AFTER THE INGESTION INCIDENT. SIMILAR CANCERS HAVE BEEN OBSERVED AT THE SITES OF

SEVERE THERMAL BURNS. THESE CANCERS MAY BE DUE TO TISSUE DESTRUCTION AND SCAR FORMATION RATHER THAN THE SODIUM HYDROXIDE.

Effects of Overexposure:HEALTH HAZARDS ACUTE AND CHRONIC (CONT): MEMBRANES AND UPPER RESPIRATORY TRACT. INHALATION MAY BE FATAL AS RESULT OF SPASM, INFLAMMATION AND EDEMA OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA. SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING, LARYNGITIS, DYSPNEA, HEADACHE, NAUSEA AND

VOMITING. MAY CAUSE SEVERE PNEUMONITIS. MAY CAUSE DELAYED LUNG INJURY. INGESTION: CORROSIVE! BURNS IN MOUTH, PHARYNX AND GASTROINTESTINAL TRACT. MAY CAUSE PAIN, VOMITING, DIARRHEA, ABDOMINAL PAIN, INFLAMMATION OF LARYNX, EXTENSIVE DAMAGE OR PERFORATION OF ESOPHAGUS, COLLAPSE. MAY BE FATAL. (TOXICOLOGICAL INFORMATION)

===== First Aid Measures =====

First Aid: EYE CONTACT: IMMEDIATELY FLUSH WITH COPIOUS QUANTITIES OF WATER FOR AT LEAST 30 MINUTES HOLDING LIDS APART TO ENSURE FLUSHING OF ENTIRE SURFACE. IF IRRITATION PERSISTS, REPEAT FLUSHING. SEEK IMMEDIATE MEDICAL ATTENTION. DO NOT TRANSPORT VICTIM UNTIL RECOMMENDED FLUSHING PERIOD IS COMPLETED UNLESS FLUSHING CAN BE CONTINUED DURING TRANSPORT. SKIN CONTACT: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 30 MIN, WHILE REMOVING CONTAMINATED CLOTHING & SHOES. IF IRRITATION PERSISTS, REPEAT FLUSHING. SEEK IMMEDIATE MEDICAL ATTENTION. DO NOT TRANSPORT VICTIM UNTIL THE RECOMMENDED FLUSHING PERIOD IS COMPLETED UNLESS FLUSHING (OTHER INFO)

===== Fire Fighting Measures =====

Autoignition Temp: Autoignition Temp Text: NOT AV
Lower Limits: NOT APPLIC
Upper Limits: NOT APPLIC
Extinguishing Media: USE MEDIA SUITABLE FOR SURROUNDING MATERIALS. TAKE CARE NOT TO SPLASH OR SPLATTER THE MATERIAL.
Fire Fighting Procedures: WEAR ADEQUATE PERSONAL PROTECTION TO PREVENT CONTACT WITH MATERIAL OR ITS COMBUSTION PRODUCTS. SELF CONTAINED BREATHING APPARATUS (NIOSH APVD -) WITH A FULL FACEPIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE. COOL CONTAINING VESSELS WITH FLOODING QUANTITIES OF WATER UNTIL WELL AFTER FIRE IS OUT.
Unusual Fire/Explosion Hazard: REACTS WITH MOST COMMON METALS TO PRODUCE HYDROGEN (EXPLOSIVE AND FLAMMABLE GAS). NOT EXPECTED TO BE SENSITIVE TO STATIC DISCHARGE. NOT EXPECTED TO BE SENSITIVE TO MECHANICAL IMPACT. EMITS TOXIC FUMES U

UNDER FIRE CONDITIONS.

FLAMMABLE LIMITS: NOT APPLICABLE. FIRE DEGRADATION PRODUCTS:
SODIUM OXIDE.

===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE THE AREA. ELIMINATE ALL SOURCES
IGNITION. ABSORB ON SAND OR VERMICULITE AND PLACE IN A CLOSED
CONTAINER FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER
MATERIAL PICKUP IS COMPLETE. DO NOT EMPTY INTO DRAINS. DO NOT
TOUCH DAMAGED CONTAINER OR SPILLED MATERIAL. SO

LUTIONS ARE VERY

SLIPPERY CAUSING SLIPPING HAZARD ON FLOORS.

Neutralizing Agent:WEAK ACID

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL PLACE AWAY FROM HEATED
AREAS, SPARKS AND FLAME. STORE IN A WELL VENTILATED AREA. STORE
AWAY FROM INCOMPATIBLE MATERIALS. DO NOT ADD ANY OTHER MATERIAL TO
CONTAINER. DO NOT WASH DOWN TH E DRAIN. DO NOT BREATHE GAS / FUMES
/ VAPOR / SPRAY. IN CASE OF INSUFFICIENT (TRANSPOR

T INFO)

Other Precautions:SPECIAL PRECAUTIONS OR COMMENTS: EXTREMELY CORROSIVE!
CAUSES SEVERE BURNS! RISK OF SERIOUS DAMAGE TO EYES. CORROSIVE
EFFECTS ON THE SKIN AND EYES MAY BE DELAYED, AND THE DAMAGE MAY
OCCUR WITHOUT THE S ENSATION OR ONSET OF PAIN. STRICT ADHERENCE TO
FIRST AID MEASURES FOLLOWING ANY EXPOSURE IS ESSENTIA L. DO NOT
(SARA III)

===== Exposure Controls/Personal Protection =====

Respiratory Protection:A OSHA APPROVED RESPIRATOR IS ADVISED
IN THE

ABSENCE OF PROPER ENVIRONMENTAL CONTROLS. IF MORE THAN TLV, DO NOT
BREATHE VAPOR, WEAR A (NIOSH APPROVED -) SELF-CONTAINED BREATHING
APPARATUS. P ROTECTIVE CLOTHING IN CASE OF SPILL AND LEAK:
WEAR SELF-CONTAINED BREATHING APPARATUS (NIOSH APPROVED -), RUBBER
BOOTS AND HEAVY RUBBER GLOVES. FULL SUIT.

Ventilation:USE ONLY IN CHEMICAL FUME HOOD TO KEEP AIRBORNE LEVELS
BELOW RECOMMENDED EXPOS LIMITS. VENTILATION SHOULD BE CORROSION
PROOF. DO NOT USE IN UNVENT

ILATED SPACES.

Protective Gloves:IMPERVIOUS RUBBER GLOVES.

Eye Protection:FACE SHIELD AND SPLASH GOGGLES (ANSI APPROVED -).

Other Protective Equipment:APRON, COVERALLS, AND/OR OTHER RESISTANT PROTECTIVE CLOTHING SUFFICIENT TO PROTECT SKIN. HAVE AVAILABLE AND USE AS APPROPRIATE: RUBBER SUITS, APRONS AND BOOTS. ENSURE THAT (WORK HYGENICN PRACTCES)

Work Hygienic Practices:OTHER PROTECTIVE EQUIPMENT (CONT): EYEWASH STATION AND SAFETY SHOWER IS PROXIMAL TO THE WORK-STATION LOCATION. HAVE AVAILABLE AND USE AS APPROPRIATE: FACE SHIELDS, RUBBER SUITS, APRONS, AND BOOTS.

Supplemental Safety and Health

CHEMICAL FORMULA: NOT APPLICABLE. SYNONYMS: R-5200F, R-5200Y, R-5240 (>5 - 10%), R-5260K, R-5250KB, R-524010, R-52408. MATERIAL USES: FOR LABORATORY USE ONLY. CI #: NOT AVAILABLE. CAS #: NOT APPLICABLE. FORMULA WEIGHT: NOT APPLICABLE. SUPERSEDES: N/P. NFPA: HEALTH - 1, FIRE - 0, REACTIVITY - 1.

===== Physical/Chemical Properties =====
=====

HCC:B1

Boiling Pt:B.P. Text:NOT AVAILABLE

Melt/Freeze Pt:M.P/F.P Text:NOT AVAILABLE

Vapor Pres:NOT AVAILABLE

Vapor Density:NOT AVAIL

Spec Gravity:>1 (WATER = 1)

pH:>7 (1%SOLN/H2O)

Evaporation Rate & Reference:NOT AVAILABLE

Solubility in Water:MISCIBLE IN WATER.

Appearance and Odor:COLORLESS LIQUID. ODORLESS.

Percent Volatiles by Volume:NOT AVAIL

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:NO

ACIDS, ACID ANHYDRID

ES, ACID CHLORIDES, WATER, FLAMMABLE/COMBUSTIBLE

MATERIALS, ORGANIC MATERIALS, PEROXIDES, ORGANOHALOGEN COMPOUNDS (MAY REACT TO FORM SPONTANEOUSLY COMBUSTIBLE MATLS), NITRO & CHLORO ORGANIC COMPOUNDS MAY

Stability Condition to Avoid:UNSTABLE. ABSORBS CARBON DIOXIDE & MOISTURE FROM AIR. (MATLS TO AVOID CONT'D) REACT EXPLOSIVELY), CHLOROHYDRIN, MALEIC ANHYDRIDE, NITROMETHANE, NITROPROPANE, (TOXICOLOGICAL)

Hazardous Decomposition Products:NOT AVAILABLE. REACTION PRODUCTS:

ABSORBS CARBON DIOXIDE FROM AIR OR OTHER SOURCES FORMING SODIUM CARBONATE. WILL CORRODE WIDE VARIETY OF METALS. CONTACT WITH NITRO ORGANIC (CONDITONS TO AVOID)

Conditions to Avoid Polymerization:WILL NOT OCCUR. (HAZ DECOMP PRODUCTS CONT'D) COMPOUNDS MAY FORM SHOCK SENSITIVE MATERIALS.

===== Toxicological Information =====

Toxicological Information:TOXICITY VALUES OF HAZARDOUS INGREDIENTS:

SODIUM HYDROXIDE: ORAL (LD50): ACUTE: 140-340 MG/KG (RAT).

DERMAL

(LD50): ACUTE: 1350 MG/KG (RABBIT). INTRAPERITONEAL (LD50): ACUTE: 40 MG/M3 (MOUSE). EFFEC TS OF ACUTE EXPOSURE: 10 MG/M3 (SODIUM

HYDROXIDE) IS IMMEDIATELY DANGEROUS TO LIFE OR HEALTH. EYE:

IRRITATION: EYE-RABBIT 50 UG/24H SEVERE (NAOH). SKIN: IRRITATION:

SKIN-RABBIT 500 MG/24H SEVERE (NA OH). SIGNS AND SYMPTOMS OF

OVEREXPOSURE (CONT): EFFECTS OF CHRONIC OVEREXPOSURE: MAY RESULT IN AREAS OF DESTRUCTION OF SKIN TISSUE OR PRIMARY IRRITANT DERMATITIS.

SIMI

LARLY, INHALATION OF VAPORS OR MISTS MAY CAUSE (ECOLOGICAL INFO)

===== Ecological Information =====

Ecological:N/P. TOXICOLOGICAL INFO (CONT): VARYING DEGREES OF DAMAGE TO THE AFFECTED TISSUES AND ALSO INCREASING SUSCEPTIBILITY TO RESPIRATORY ILLNESS. MUTAGENIC EFFECTS: NOT AVAILABLE. TERATOGENIC EFFECT S: NOT AVAILABLE. TOXICITY OF THE PRODUCT TO THE REPRODUCTIVE SYSTEM: NOT AVAILABLE. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL

, PHYSICAL, AND TOXICITY OF THIS SUBSTANCE HAS NOT BEEN FULLY INVESTIGATE D. (SEE EXPLANATION OF CARCINOGENICITY FOR ADDITIONAL EFFECTS OF CHRONIC OVEREXPOSURE -). WASTE DISPOSAL (CONT): DO NOT CONTAMINATE DOMESTIC OR IRRIGATION WATER SUPPLIES, LAKES, STREAMS, P ONDS, OR RIVERS.

===== Disposal Considerations =====

Waste Disposal Methods:NEUTRALIZE CAREFULLY WITH WEAK ACID PH 6 TO 8. DISPOSE OF WASTE MATERIAL AT APPROVED (HAZARDOUS) WASTE

TREATMENT/DISPOSAL FACILITY IN ACCORDANCE WITH APPLICABLE LOCAL, PROVINCIAL AND FEDERAL REGULATIONS. HARMFUL TO AQUATIC LIFE AT LOW CONCENTRATIONS. CAN BE DANGEROUS IF ALLOWED TO ENTER DRINKING WATER INTAKES. (ECOLOGICAL INFO)

===== MSDS Transport Information =====

Transport Information:TDG ROAD/RAIL: TDG CLASS: 8 9.2. PIN: UN1824 PG:

II. HANDLING AND STORAGE PREC (CONT):VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT. KEEP CONTAINER TIGHTLY CLOSED AND

DRY. MANIPULATE IN A WELL VENTILATED AREA OR UNDER AN ADEQUATE FUME HOOD. EMPTY CONTAINERS MAY CONTAIN A HAZARDOUS RESIDUE. HANDLE AN OPEN CONTAINER WITH CARE. TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. AVOID CONTACT WITH A COMBUSTIBLE MATERIAL (WOOD, PAPER, OIL, CLOTHING...). THIS PRODUCT MUST BE MANIPULATED BY QUALIFIED PERSONNEL. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. WASH WELL AFTER USE. IN ACCORDANCE WITH GOOD STORAGE AND HANDLING (SARA III)

===== Regulatory Information =====

SARA Title III Information:N/P. TRANSPORT INFO (CONT):

PRACTICES. DO NOT ALLOW SMOKING AND FOOD CONSUMPTION WHILE HANDLING. AFTER HANDLING, ALWAYS WASH HANDS THOROUGHLY WITH SOAP AND WATER. IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHEN POSSIBLE). OTHER PRECAUTIONS (CONT): BREATHE VAPOR. AVOID ALL CONTACT WITH THE PRODUCT. AVOID

PROLONGED OR REPEATED EXPOSURE. USE ONLY IN A CHEMICAL FUME HOOD. ABSORBS CARBON DIOXIDE FROM AIR. WHEN MIXING WITH WATER ALWAYS ADD THIS PRODUCT TO THE WATER IN SMALL AMOUNTS TO AVOID SPATTERING (STIR CONTINUOUSLY). NEVER ADD WATER TO THIS PRODUCT. (FEDERAL REGULATORY)

Federal Regulatory Information:WHMIS: NOT CONTROLLED UNDER WHMIS (CANADA). SARA III (CONT): THE WATER SHOULD BE LUKEWARM.

NEVER START WITH HOT OR COLD WATER. HANDLE AN OPEN CONTAINER WITH CARE.

CONTAINER SHOULD BE OPENED ONLY BY A TECHNICALLY QUALIFIED PERSON. SYNERGISTIC MATERIALS: NOT AVAILABLE.

State Regulatory Information:N/P. PHYSICAL / CHEMICAL

PROPERTIES (CONT): ODOR THRESHOLD: NOT AVAILABLE. WATER / OIL DIST COEFF: NOT AVAILABLE.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The U

nited States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.