

VAN WATERS AND ROGERS INC -- SULFURIC ACID ELECTROLYTE -- 6810-00-236-0702

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Product Identification
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Product ID:SULFURIC ACID ELECTROLYTE

MSDS Date:11/01/1993

FSC:6810

NIIN:00-236-0702

MSDS Number: BSKTK

=== Responsible Party ===

Company Name:VAN WATERS AND ROGERS INC

Address:6100 CARILLON PT

City:KIRKLAND

State:WA

ZIP:98033

Country:US

Info Phone Num:206-889-3712

Emergency Phone Num:206-

889-3712/800-424-9300(CHEMTREC)

CAGE:0STM5

=== Contractor Identification ===

Company Name:CHEMICAL COMMODITIES AGENCY, INC.

Address:27447 PACIFIC STREET

Box:City:HIGHLAND

State:CA

ZIP:92346-2640

Country:US

Phone:909-864-2310

CAGE:60777

Company Name:VOPAK USA INC

Address:6100 CARILLON POINT

Box:City:KIRKLAND

State:WA

ZIP:98033-7357

Country:US

Phone:425-889-3400/425-889-3617

CAGE:0STM5

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Composition/Information on Ingredients
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Ingred Name:SULFURIC ACID (SARA III)

CAS:7

664-93-9

RTECS #:WS5600000

Fraction by Wt: 29%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9394

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:LD50 ORAL RAT IS 2140 MG/KG

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO

Health Hazards Acute and Chronic:ACUTE: SEVERE BURNS AND ULCERATION OF SKIN, EYES, MOUTH, THROAT, ESOPHA

GUS AND STOMACH. INFLAMMATION OF

BRONCHIAL MEMBRANES. CHRONIC: EROSION OF TEETH, INFLAMMATION OF NOSE, THROAT AND BRONCHIAL TUBES .

Explanation of Carcinogenicity:SULFURIC ACID MISTS ARE CLASSIFIED IARC-2B.

Effects of Overexposure:IF CONTACTED, SEVERE BURNS AND ULCERATION OF SKIN AND EYES. IF INHALED, SEVERE RESPIRATORY IRRITATION. IF INGESTED, SEVERE BURNS AND ULCERATION.

Medical Cond Aggravated by Exposure:SULFURIC ACID MAY AGGRAVATE SKIN DISEASES SUCH AS ECZEMA AND DER MATITIS.

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

First Aid:EYES/SKIN: FLUSH WITH PLENTY OF WATER. SEE DOCTOR IMMEDIATELY. REMOVE CONTAMINATED CLOTHING AND SHOES. INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DO NOT INDUCE VOMITING. GIVE MILK OR WATER, FOLLOWED BY 2 OUNCES OF MILK OF MAGNESIA (NO CARBONATES). SEE DOCTOR IMMEDIATELY.

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

Flash

Point:NONE

Autoignition Temp:Autoignition Temp Text:NONE

Lower Limits:NONE

Upper Limits:NONE

Extinguishing Media:USE WATER SPRAY. IF ONLY A SMALL AMOUNT OF COMBUSTIBLES IS PRESENT SMOTHER FIRE WITH DRY CHEMICAL.

Fire Fighting Procedures:WEAR SULFURIC ACID RESISTANT CLOTHING AND A FULL FACED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:DO NOT USE SOLID WATER STREAM ON RUPTURED CONTAINERS. ACID REACTS VIOLENTLY WITH WATER AND CAN SPATTER.

CONTACT WITH METALS CAN GENERATE FLAMMABLE HYDROGEN GAS.

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

Spill Release Procedures:WEAR APPROPRIATE PROTECTIVE EQUIPMENT. DILUTE CAUTIOUSLY WITH WATER. COVER WITH SODA ASH OR QUICKLIME. SCOOP UP AND PLACE IN APPROPRIATE DISPOSAL CONTAINER. FLUSH AREA WITH LARGE AMOUNTS OF WATER.

Neutralizing Agent:SODA ASH (SODIUM CARBONATE), BAKING SODA OR QUICKLIME (CALCIUM OXIDE).

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

Handling and Storage Precautions:PROTECT FROM PHYSICAL DAMAGE. KEEP AWAY FROM COMBUSTIBLES. KEEP CONTAINERS UPRIGHT. NO SMOKING IN STORAGE AREA.

Other Precautions:LOOSEN CLOSURES CAREFULLY. FOR CARRYING GLASS BOTTLES, USE RUBBER AND PROTECTIVE ENCLOSURES.

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

Respiratory Protection:NIOSH/MSHA-APPROVED CARTRIDGE RESPIRATOR FOR ACIDS OR E.G. GAS MASK WITH ACID CANTER WITH HIGH EFFICIENCY PARTICULATE FILTER.

Ventilation:GENERAL (MECHANICAL) VENTILATION. LOCAL EXHAUST IN CONFINED AREAS. USE CORROSION PROOF EQUIPMENT.

Protective Gloves:RUBBER GLOVES.

Eye Protection:GOGGLES AND FULL FACE PLASTIC SHIELD

Other Protective Equipment:RUBBER APRON AND BOOTS, ACID RESISTANT TROUSERS AND JACKET. EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

NONE.

===== Physical/Ch

Chemical Properties =====

HCC:C1

Boiling Pt:B.P. Text:590F (94%)

Melt/Freeze Pt:M.P/F.P Text:-17F (94%)

Vapor Pres:0.001(94%)

Vapor Density:3.38

Spec Gravity:1.21 (FROM TIR)

pH:ACIDIC

Solubility in Water:COMPLETE

Appearance and Odor:OILY, COLORLESS TO SLIGHTLY YELLOW, CLEAR TO TURBID LIQUID. ODORLESS.

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

Stability Indicator/Materials to Avoid:YES

ORGANIC MATERIALS, NITRO-COMPOUNDS, CARBIDES, DIENES, ALCOHOLS, WATER,

POWDERED METALS, SOME NON-ACID-RESISTANT PLASTICS

Stability Condition to Avoid:TEMPERATURES ABOVE 572F OR HIGHER YIELD

SULFUR TRIOXIDE GAS, WHICH IS TOXIC, CORROSIVE AND AN OXIDIZER.

Hazardous Decomposition Products:SULFURIC ACID FUMES, SULFUR DIOXIDE, SULFUR TRIOXIDE.

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

Waste Disposal Methods:CONSULT YOUR LOCAL ENVIRONMENTAL OFFICER.

DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL ENVIRONMENTAL RE

GULATIONS. EPA HAZARDOUS WASTE NUMBER D002 CORROSIVE.

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