

VAN WATERS AND ROGERS INC DIV OF UNIVAR CORP -- SULFURIC ACID -- 6810-00-975-0707
===== Product Identification =====

Product ID:SULFURIC ACID
MSDS Date:03/22/1994
FSC:6810
NIIN:00-975-0707
MSDS Number: BVHFV
=== Responsible Party ===
Company Name:VAN WATERS AND ROGERS INC DIV OF UNIVAR CORP
Address:6100 CARILLON PT
City:KIRKLAND
State:WA
ZIP:98033
Country:US
Info Phone Num:206-889-3400
Emergency P
hone Num:800-424-9300(CHEMTREC)
Preparer's Name:MSDS COORDINATOR
CAGE:0STM5
=== Contractor Identification ===
Company Name:VAN WATERS AND ROGERS
Address:2256 JUNCTION AVE
City:SAN JOSE
State:CA
ZIP:95131
Country:US
Phone:408-435-8700/800-424-9300(CHEMTREC)
CAGE:0AN91
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

===== Composition/Information on Ingredients =====

Ingred Nam

e:SULFURIC ACID (SARA III)
CAS:7664-93-9
RTECS #:WS5600000
Fraction by Wt: >93%
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:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:CAUSES SEVERE BURNS TO EYES, SKIN, AND

ALL BODY TISSUE. EYE DAMAGE MAY BE PERMANENT. DESTRUCTION OF TISSUE
MAY RESULT FROM DIRECT CHEMICAL REACTION WITH TISSUE, FROM THERMAL
BURNS AND FROM DEHYDRATION (REMOVAL OF WATER) OF THE TISSUE.

Explanation of Carcinogenicity:THIS CHEMICAL IS NOT LISTED BY IARC,
NTP, OR OSHA AS A CARCINOGEN.

Effects of Overexposure:INHALED-COUGHING, WHEEZING, SHORTNESS OF
BREATH, TIGHTNESS IN CHEST, CHEST PAIN. EYES-PAIN, BLURRED VISION,
REDNESS, TEARING. SKIN-REDNESS, PAIN, BURNS, SWELLI
NG. INGESTED:

NAUSEA, VOMITING, STOMACH P AIN, BURNS TO MOUTH/THROAT/ESOPHAGUS.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:IN ALL CASES GET IMMEDIATE MEDICAL ATTENTION.
INHALATION:REMOVE TO FRESH AIR.RESUSCITATE IF NOT BREATHING.
EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES,HOLD
LIDS OPEN. SKIN:REMOVE CONTAM INATED CLOTHING.WASH WITH PLENTY OF
WATER FOR 15 M
INUTES. INGESTION:DO NOT INDUCE VOMITING.IF
CONSCIOUS,GIVE SEVERAL GLASSES OF MILK OR WATER.

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

Flash Point:NOT FLAMMABLE
Lower Limits:NOT GIVEN
Upper Limits:NOT GIVEN
Extinguishing Media:USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING
FIRE. USE WATER SPRAY TO COOL CONTAINERS. DO NOT GET WATER IN
CONTAINER
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A
FULL FACED SELF CONTAINED BREATHING

APPARATUS. GENERATES HEAT UPON

ADDITION OF WATER WITH POSSIBLE SPLATTERING.

Unusual Fire/Explosion Hazard:NEUTRALIZE RUNOFF WITH LIME, SODA ASH,
ETC, TO PREVENT CORROSION OF METALS OF FORMATION OF HYDROGEN GAS.
EVACUATE PERSONNEL TO SAFE AREA. STAY UPWIND.

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

Spill Release Procedures:ELIMINATE ALL SOURCES OF IGNITION. WEAR FULL
PROTECTIVE EQUIPMENT. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. DIKE
TO RETAIN RUNOFF

F. PUMP LIQUID TO SALVAGE TANK. NEUTRALIZE SMALL
AMOUNTS WITH SODA ASH OR LIME. MAKE SLURRY AND SHOVEL INTO
DISPOSAL DRUM.

Neutralizing Agent:SODIUM BICARBONATE OR A SODA ASH/SLAKED LIME MIXTURE
(50-50)

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

Handling and Storage Precautions:KEEP CONTAINER TIGHTLY CLOSED. KEEP
CONTAINERS AWAY FROM HEAT. ISOLATE FROM INCOMPATIBLE MATERIALS. ADD
ACID TO WATER SLOWLY TO PREVENT SPLATTERING.

Other Precautions:ADDITION

ON TO WATER RELEASES HEAT WHICH CAN RESULT IN
VIOLENT BOILING AND SPATTERING. ALWAYS ADD SLOWLY AND IN SMALL
AMOUNTS. NEVER USE HOT WATER. NEVER ADD WATER TO ACIDS. ALWAYS ADD
ACIDS TO WATER. EMPTY CONTAINERS MAY BE HAZARDOUS.

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

Respiratory Protection:NONE NORMALLY REQUIRED. IF ENGINEERING CONTROLS
FAIL OR NON-ROUTINE USE OR EMERGENCY OCCURS; USE NIOSH/MSHA
APPROVED RESPIRATOR OR SUPPLIED AIR RESPIRATOR OR

SCBA, AS

REQUIRED. USE IAW 29 CFR 1910.134 AND MANUFACTURER'S
RECOMMENDATIONS.

Ventilation:USE SUFFICIENT MECHANICAL (GENERAL) VENTILATION TO MAINTAIN
EXPOSURE BELOW TLV REQUIREMENTS.

Protective Gloves:POLYVINYL CHLORIDE GLOVES

Eye Protection:CHEMICAL SPLASH GOGGLES AND FACE SHIELD

Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER.

INDUSTRIAL-TYPE IMPERVIOUS WORK CLOTHING, BOOTS AND APRON AS
REQUIRED.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICE

S AND
RECOMMENDED PROCEDURES. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.
Supplemental Safety and Health
AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO
NOT BREATHE VAPORS OR MISTS. ENVIRONMENTAL NOTE: CLEAN WATER ACT
SEC. 311-YES, RQ=1000 LBS.

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

HCC:C1
Boiling Pt:B.P. Text:534F,279C
Melt/Freeze Pt:M.P/F.P Text:-31F,-35C
Decomp Temp:Decomp Text:NOT GIVEN
Vapor Pres: