Product ID:SULFAMIC ACID MSDS Date:02/09/1990 FSC:6810 NIIN:00-146-1586 **MSDS Number: BPFQL** === Responsible Party === Company Name: VAN WATERS AND ROGERS INC., UNIVAR CORP. Address:1600 NORTON BLDG. 801 2ND AVENUE City:SEATTLE State:WA ZIP:98104-1564 Country:US Info Phone Num:408-435-8700 Emergency Phone Num:206-447-5911/800-424-9300(CHEMTREC) CAGE:87 664 === Contractor Identification === Company Name: VAN WATERS AND ROGERS INC., UNIVAR CORP. Address:1600 NORTON BLDG. 801 2ND AVENUE Box:City:SEATTLE State:WA ZIP:98104-1564 Country:US Phone:206-447-5911/800-424-9300(CHEMTREC) CAGE:87664

Ingred Name:SULFAMIC ACID CAS:5329-14-6 RTECS #:WO5950000 Fraction by Wt: >99.0% Other REC Limits:NONE SPECIFIED

LD50 LC

50 Mixture:LD50 (ORAL RAT) IS 3160 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:ACUTE-EYE:CAN CAUSE SEVERE IRRITATION & POSSIBLE BURNS,PAIN,REDNESS,TEARING.SKIN:MAY CAUSE SEVERE PAIN,BURNS & STAINS.INHALED:FUMES/MIST MAY CAUSE SEVERE MUCOUS MEMBRANE IRRITATION, COUGHING,CHOKING,H EADACHE,DIZZINESS & DELAYED PULMONARY EDEMA.INGESTED:MAY CAUSE SEVERE BURNING
RRHEA.CHRONIC-EYE DAMAGE. Explanation of Carcinogenicity:NONE OF THE COMPOUNDS IN THIS PRODUCT IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.
Effects of Overexposure:CAN CAUSE SEVERE EYE IRRITATION AND POSSIBLE BURNS, PAIN, REDNESS AND TEARING. MAY CAUSE SEVERE PAIN, BURNS AND STAINS OF SKIN. FUMES OR MIST MAY CAUSE SEVERE MUCOUS MEMBRANE IRRITATION, COUGHING, CHO KING, HEADACHE, DIZZINESS AND DELAYED PULMONARY EDEMA. IF INGESTED, MAY CAUSE SEVERE BURNING PAIN, VOMITING
, DIARRHEA.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY THE MANUFACTURER/SUPPLIER.
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First Aid:SEEK MEDICAL CARE IN ALL CASES.EYES: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 30 MINUTES,WASHING UNDER THE EYELIDS.INHALATION:REMOVE TO FRESH AIR.PROVIDE CPR/OXYGEN IF NEEDED. INGESTION:DO NOT INDUCE VOMITING.IF CONSCIOUS,RINSE MOUTH WITHWATER & DRINK MILK/WATER.SKIN:IMMEDIATELY FLUSH WITH LARGE AMO
UNT OF WATER.THE MATERIAL IS ACIDIC AND CORROSIVE.IT CAUSES ACID BURNS.
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Flash Point:NONE Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, HALON, OR DRY CHEMICAL. COOL FIRE EXPOSED CONTAINERS WITH WATER. Fire Fighting Procedures:IN THE EVENT OF FIRE, WEAR FULL PROTECTIVE

CLOTHING & NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE. Unusual Fire/Expl

osion Hazard: COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

Spill Release Procedures: WEAR PROTECTIVE EQUIPMENT. VENTILATE AREA. AVOID GENERATION OF DUST/MIST & SPLASHING .DIKE & CONTAIN SPILL.DON'T ALLOW SPILLS TO ENTER SEWERS, STREAM/SURFACE WATER.USE ACID RESISTANT VACUUM/WET SWEEPING TO PICK UP SOLIDS.DILUTE SOLUTIONS & NEUTRALIZE. Neutralizing Agent:WEAK BASE (SODA ASH OR BAKING SODA) Handling and Storage Precautions: STORAGE: STORE IN TIGHTLY CLOSED CONTAINERS IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM BASES & HEAT. Other Precautions: PROTECT CONTAINERS FROM MOISTURE & FROM PHYSICAL DAMAGE.MISUSE OF EMPTY CONTAINERS CAN BE HAZARDOUS.COMPLETELY DRAIN & COMMERCIALLY CLEAN BEFORE REUSE. AVOID CONTACT WITH THE SOLID MATERIAL, SOLUTIONS OR MISTS. IT CAUSES TISSUE DAMAGE. Respiratory Protection: NONE STATED BY MFR. Ventilation:NORMAL ROOM VENTILATION. Protective Gloves: IMPERVIOUS WHEN HANDLING. Eve Protection:SAFETY GLASSES Other Protective Equipment:NONE STATED Work Hygienic Practices: USE GOOD INDUSTRIAL HYGIENE PRACTICE. WASH

AFTER USING THE PRODUCT AND BEFORE EATING, DRINKING, ETC. Supplemental Safety and Health

HCC:C1

Spec Gravity:2.125 pH:1.18 Solubility in Water:PARTIAL (17.7%) Appearance and Odor:COLORLESS, ODORLESS WHITE TO OFF-WHITE CRYSTALS. Percent Volatiles by Volume:NIL

Stability Indicator/Materials to Avoid:YES NITRIC ACID, METAL NITRATES AND NITRITES AND BASES Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES Hazardous Decomposition Products:THERMAL DECOMPOSITION MAY RELEASE TOXIC FUMES OF AMMONIA, OXIDES OF SULFUR AND NIT

ROGEN

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL,STATE AND FEDERAL REGULATIONS. EMPTY TANKS AND CONTAINERS SHOULD BE COMMERCIALLY CLEANED AND RECONDITIONED BEFORE REUSE.

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