

GORE W L AND ASSOCIATES INC -- TETRA-ETCH ETCHANT -- 6850-00-431-8662

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

Product ID:TETRA-ETCH ETCHANT

MSDS Date:03/20/1995

FSC:6850

NIIN:00-431-8662

MSDS Number: BKZZC

=== Responsible Party ===

Company Name:GORE W L AND ASSOCIATES INC

Address:1505 N FOURTH STREET

Box:3000

City:FLAGSTAFF

State:AZ

ZIP:86003-3000

Country:US

Info Phone Num:602-526-3030

Emergency Phone

Num:520-526-3030

Resp. Party Other MSDS Num.:HCP-001

Preparer's Name:ART MOLINA

Chemtrec Ind/Phone:(800)424-9300

CAGE:6D150

==== Contractor Identification ===

Company Name:ELECTRO-2000 INC (770-345-7573)

Box:UNKNOW

CAGE:04BQ8

Company Name:GORE W L AND ASSOCIATES INC

Address:1505 N FOURTH STREET

Box:3000

City:FLAGSTAFF

State:AZ

ZIP:86003-3000

Country:US

Phone:602-526-1290

CAGE:6D150

Company Name:HUGHES RS CO INC

Address:1040 CORPORATION PKY NO 112

Box:City:RALEIGH

State:NC

ZIP:27610

Country:US

CA

GE:0PDP9
Company Name:R. S. HUGHES CO.
Address:6530 5TH PL S
Box:81084
City:SEATTLE
State:WA
ZIP:98108
Country:US
Phone:206-767-4463
Contract Num:SP0450-99-M-C277
CAGE:9H439
Company Name:TIM TUSSING ENTERPRISES
Box:UNKNOW
CAGE:0EV39
Company Name:W L GORE & ASSOCIATES
Address:1500 NORTH FOURTH ST
Box:3000
City:FLAGSTAFF
State:AZ
ZIP:86003
Country:US
Phone:602-526-3030/800-645-4337
CAGE:1BX19

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

Ingred Name:ETHYLENE GLYCOL DIMETHY
L ETHER
CAS:110-71-4
RTECS #:K11451000
= Wt:74.
Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM NAPATALENE COMPLEX
CAS:113492-05-0
= Wt:25.
Other REC Limits:NONE RECOMMENDED

Ingred Name:VINYL METHYL ETHER
CAS:107-25-5
RTECS #:KO2300000
= Wt:1.
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO

IARC:NO OSHA:NO

Health Hazards Acute and Chronic:DIRECT EYE CONTACT WILL CAUSE EYE BURNS. VAPORS ARE IRRITATING TO EYES. DIRECT CONTACT WITH SKIN WILL CAUSE IRRITATION AND POSSIBLE BURNS. MATERIAL CAN BE ABSORBED THROUGH THE SKIN. INGESTION WILL CAUSE BURNS TO MOUTH, ESOPHAGUS AND GI TRACT. INHALATION CAN CAUSE BREATHING DIFFICULTY, IRRITATION, DIZZINESS, DROWSINESS.

Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.

Effects of Overexposure:EYE BURNS, EYE IRRITATION, SKIN BURNS, SKIN IRRITATION, BURNS TO MOUTH/ESOPHAGUS/GI TRACT, BREATHING DIFFICULTY, RESPIRATORY TRACT IRRITATION, DIZZINESS, DROWSINESS, NAUSEA.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.
N. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

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

Flash Point Method:PMCC
Flash Point:=-8.C, 46.4F
Autoignition Temp:=-192.2C, 378.F
Lower Limits:1.80 %
Upper Limits:10.4 %
Extinguishing Media:DRY CHEMICAL PREFERABLY WITH A NITROGEN PROPELLANT.
Fire Fighting Procedures:FIRE FIGHTERS SHOULD WEAR SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. COOL TANKS AND CONTAINERS EXPOSED TO FIRE WITH WATER.
Unusual Fire/Explosion Hazard:EXTREMELY FLAMMABLE. VAPOR EXPLOSION HAZARD. MAY BE IGNITED BY HEAT, SPARKS OR FLAME. VAPORS MAY TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK.

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

Spill Release Procedures:CONTAIN AND COVER

VER WITH INERT MATERIAL SUCH AS SAND OR DIRT. REMOVE ALL SOURCES OF IGNITION. USE NON-SPARKING TOOLS, TRANSFER INTO POLYPROPYLENE DRUMS. USE PROPER PERSONAL PROTECTIVE EQUIPMENT.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE UNDER NITROGEN. STORE BELOW 32F FOR BEST PERFORMANCE AND STABILITY. ALLOW MATERIAL TO REACH ROOM TEMPERATURE PRIOR TO USE. DO NOT BREATHE VAPORS.

Other Precautions:WEAR CHEMICAL RESISTANT GLOVES AND GOGGLES WHEN OPENING CONTAINER OR USING LIQUID. OPEN CAREFULLY TO GENTLY RELEASE ANY BUILT-UP PRESSURE. FOLLOW PROCEDURES FOR FLAMMABLE MATERIALS. SOURCES OF STATIC DISCHARGE MUST BE GROUNDED.

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

Respiratory Protection:IF EXPOSURE MAY OR DOES EXCEED OCCUPATION EXPOSURE LIMITS (THE MANUFACTURER OF ETHYLENE GLYCOL DIMETHYL ETHER RECOMMENDS 5 PPM TWA AND

W. L. GORE ADOPTED 1 PPM OVER 8 HOURS) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR.

Ventilation:EXHAUST VENTILATION SUFFICIENT TO KEEP AIRBORNE CONCENTRATIONS BELOW RESPECTIVE TLV'S.

Protective Gloves:BUTYL RUBBER

Eye Protection:CHEMICAL GOGGLES, SAFETY GLASSES W/SIDES

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING AS NECESSARY TO PREVENT SKIN CONTACT.

AN EMERGENCY EYEWASH AND SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE. DISCARD CONTAMINATED SHOES.

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

HCC:F7

NRC/State Lic Num:NONE

Boiling Pt.=85.C, 185.F

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

Vapor Pres:48 @ 20C/68F

Vapor

Density:3.11

Spec Gravity:0.96

pH:>12.5

Evaporation Rate & Reference:5 (N-BUTYL ACETATE=1)

Solubility in Water:NOT GIVEN

Appearance and Odor:GREEN-BLACK LIQUID, MOTHBALL/ETHER ODOR

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

Stability Indicator/Materials to Avoid:YES

OXIDIZING AGENTS, STRONG ACIDS, WATER

Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, OPEN FLAMES

Hazardous Decomposition Products:REACTS WITH WATER TO FORM CAUSTIC

SODA, NAPHTHALENE, SMALL

AMOUNTS OF HYDROGEN AND POLYCYCLIC

COMPOUNDS.

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

Ecological:POTENTIALLY HAZARDOUS TO THE ENVIRONMENT.

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. WASTE MAY BE REGULATED AS IGNITABLE, CORROSIVE WASTE.

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

SARA Title III Information:CERCLA SUPERFUND, 40 CFR 117, 302: UNDER THE US-EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA), A RELEASE OF 13 GALLONS COULD REQUIRE REPORTING TO THE NATIONAL EMERGENCY CENTER. ETHYLENE GLYCOL DIMETHYL ETHER AND NAPHTHALENE ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAU

THORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.65

Federal Regulatory Information:ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TOXIC SUBSTANCE CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.

State Regulatory Information:PENNSYLVANIA RIGHT-TO-KNOW: ETHYLENE GLYCOL DIMETHYL ETHER. NEW JERSEY RIGHT-TO-KNOW: ETHYLENE GLYCOL DIMETHYL ETHER 74%, SODIUM NAPHTHALENE COMPLEX 25%, VINYL METHYL ETHER 1%. MASSACHUSETTS RIGHT TO KNOW: ETHYLENE GLYCOL DIMETHYL ETHER ANDVI

NYL METHYL ETHER.

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