

ASHLAND CHEMICAL CO DIV OF ASHLAND OIL INC -- GLYCOL ETHER DM, 3600000 --  
6850-01-089-5514

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

Product ID:GLYCOL ETHER DM, 3600000

MSDS Date:03/03/1997

FSC:6850

NIIN:01-089-5514

Status Code:A

MSDS Number: CLQGC

=== Responsible Party ===

Company Name:ASHLAND CHEMICAL CO DIV OF ASHLAND OIL INC

Address:3849 FISHER RD

Box:2219

City:COLUMBUS

State:OH

ZIP:43216

Country:US

Info Phone Num:614-790-3333 / 800-325-3751

Emergency Phone Num:800-274-5263 OR 800-ASHLAND

Resp. Party Other MSDS Num.:999.0004672-005.001

CAGE:7L600

=== Contractor Identification ===

Company Name:ASHLAND CHEMICAL CO DIV OF ASHLAND OIL INC

Address:3849 FISHER RD

Box:2219

City:COLUMBUS

State:OH

ZIP:43216

Country:US

Phone:614-790-3333 / 800-325-3751

CAGE:7L600

Company Name:CHEMICAL SPECIALISTS AND DEVELOPMENT INC

Address:2210 HACKBERRY LN

Box:687

City:CONROE

State:TX

ZIP:77305

Country:US

Phone:409

-756-1065  
Contract Num:SP0450-02-M-M099  
CAGE:4N760

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

Ingred Name:DIETHYLENE GLYCOL MONOMETHYL ETHER  
CAS:111-77-3  
RTECS #:KL6125000  
= Wt:100.

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Health Hazards Acute and Chronic:EYE-MAY CAUSE MILD EYE IRRITATION.  
SKIN-MAY CAUSE MILD SKIN IRRITATION. SWALLOWING-SWALLOWING SMALL  
AMOUNTS OF THIS MATERI  
AL DURING NORMAL HANDLING IS NOT LIKELY TO  
CAUSE HARMFUL EFFECTS. SWALLOWING L ARGE AMOUNTS MAY BE HARMFUL.  
INHALATION-BREATHING OF VAPOR OR MIST IS POSSIBLE. BREATHING SMALL  
AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO  
CAUSE HARMFUL EFFECTS. BREATHING LARGE AMOUNTS MAY BE HARMFUL.  
TARGET ORGAN EFFECTS-OVEREXPOSURE TO THIS MATERIAL HAS BEEN  
SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN LAB ANIMALS, & MAY  
AGGRAVATE PRE-EXISTING DISORDERS OF THES  
E ORGANS IN HUMANS: LIVER  
ABNORMALITIES, TESTIS  
Explanation of Carcinogenicity:CANCER INFORMATION: NO DATA.  
Effects of Overexposure:SIGNS AND SYMPTOMS OF EXPOSURE TO THIS MATERIAL  
THROUGH BREATHING, SWALLOWING, AND/OR PASSAGE OF THE MATERIAL  
THROUGH THE SKIN MAY INCLUDE: STOMACH OR INTESTINAL UPSET (NAUSEA,  
VOMITING, DIARRHEA), IR RITATION (NOSE, THROAT, AIRWAYS).  
EYE-SYMPTOMS INCLUDE STINGING, TEARING, & REDNESS. SKIN-SYMPTOMS  
MAY INCLUDE REDNESS & BURNING OF SKIN. INHA  
LATION- SYMPTOMS USUALLY  
OCCUR AT AIR CONCENTRATIONS HIGHE R THAN THE RECOMMENDED EXPOSURE  
LIMITS.  
Medical Cond Aggravated by Exposure:MAY AGGRAVATE REP-EXISTING  
DISORDERS OF ORGANS IN HUMANS: LIVER ABNORMALITIES, TESTIS DAMAGE,  
KIDNEY DAMAGE.

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

First Aid:EYES-IMMEDIATELY FLUSH EYES GENTLY WITH WATER 15 MINS,  
HOLDING EYELIDS APART. IF SYMPTOMS DEVELOP, IMMEDIATELY MOVE AWAY  
FROM EXPOSURE INTO FRESH AIR

BEFORE FLUSHING. SEEK IMMEDIATE MEDICAL AID. SKIN -REMOVE SOILED CLOTHES. WASH EXPOSED AREA WITH SOAP & WATER. IF SYMPTOMS PERSIST, SEEK MEDICAL AID. SWALLOWING-SEEK MEDICAL AID. IF DROWSY OR UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH; PLACE ON LEFT SIDE, HEAD DOWN. IF CONSCIOUS & ALERT, INDUCE VOMITING (GIVE SYRUP OF IPECAC/FINGER IN THROAT). DO NOT LEAVE. INHALE-REMOVE FROM EXPOSURE & INTO FRESH AIR. SEEK IMMEDIATE MEDICAL AID. IF NOT BREATHING, BEGIN CPR OR GIVE OXYGEN.

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

Flash Point Method:SCC  
Flash Point:=91.7C, 197.F  
Autoignition Temp:Autoignition Temp Text:N/D  
Lower Limits:N/D  
Upper Limits:N/D  
Extinguishing Media:CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM.  
Fire Fighting Procedures:WATER MAY BE USED TO EXTINGUISH FIRE BY COOLING, AND DILUTING LIQUID WITH WATER. WEAR A SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WITH APPROPRIATE TURN-OUT GEAR AND CHEMICAL RESISTANT PERSONAL PROTECTIVE EQUIPMENT.  
Unusual Fire/Explosion Hazard:VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR BE MOVED BY VENTILATION AND IGNITED BY HEAT, PILOT LIGHTS, OTHER FLAMES AND IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY). EVEN JUST RESIDUE CAN IGNITE EXPLOSIVELY.

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

Spill Release Procedures:SMALL SPILL-ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL & TRANSFER TO HOOD. "SEE OTHER INFORMATION"

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

Handling and Storage Precautions:CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINER RETAIN PRODUCT RESIDUES, ALL HAZARD PRECAUTIONS GIVEN ON THIS MSDS MUST BE OBSERVED. ALL 5-GAL PAILS & LARGER ME

TAL C ONTAINERS, (TANK CARS & TANK TRUCK), SHOULD BE GROUNDED & BONDED WHEN MATERIAL IS TRANSFERRED.

Other Precautions:EMERGENCY EYEWASH FOUNTAIN & SAFETY SHOWER SHOULD BE AVAILABLE IN THE IMMEDIATE VICINITY OF POTENTIAL EXPOSURE.

WARNING. SUDDEN RELEASE OF HOT ORGANIC CHEMICAL VAPORS OR MISTS FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE & PRESSURE, OR SUDDEN INGRESS OF AIR INTO VACUUM EQUIPMENT, MAY RESULT IN IGNITIONS.

===== Exposure Control  
s/Personal Protection =====

Respiratory Protection:IF OVEREXPOSURE HAS BEEN DETERMINED OR DOCUMENTED, A NIOSH/MSHA JOINTLY APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/ MSHA RESPIRATORS UNDER SPECIFIED CONDITIONS. ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

Ventilation:PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW LEVEL OF OVEREXPOSURE FROM KNOWN ADVERSE EFFECTS.

Protective Gloves:WEAR RESISTANT -NITRILE RUBBER, TO PREVENT REPEATED OR PROLONGED SKIN CONTACT.

Eye Protection:CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED.

Other Protective Equipment:WEAR IMPERVIOUS BOOTS, CLOTHES TO PREVENT PROLONGED/REPEATED SKIN CONTACT. OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. CONSULT YOUR SAFETY REPRESENTATIVE.

Supplemental Safety and Health

NFPA RATING: HEALTH-1, FLAMMABILITY-2, REACTIVITY-0.

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

HCC:V4

Boiling Pt:=192.2C, 378.F

Melt/Freeze Pt:=-85.C, -121.F

Vapor Pres:.000@68.00F

Vapor Density:4.150

Spec Gravity:1.021-1.025@68F

pH:N/D

VOC Grams/Liter:8.51

Viscosity:3.4 CPS

Evaporation Rate & Reference:0.02 (N-BUTYL ACETATE=1)

Solubility in Water:COMPLETELY MISCIBLE

Appearance and Odor:NEAT, PT-C0 COLOR 8, CLEAR, COLORLESS LIQUID; MILD ODOR.

Percent Volatiles

tiles by Volume:100 WT

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

Stability Indicator/Materials to Avoid:YES

AVOID CONTACT WITH :STRONG OXIDIZING AGENTS.

Stability Condition to Avoid:STABLE

Hazardous Decomposition Products:MAY FORM: CARBON MONOXIDE AND CARBON DIOXIDE.

Conditions to Avoid Polymerization:PRODUCT WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.

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

Toxicological Information:EXPOSURE GUIDEL

INES: COMPONENT: DIETHYLENE

GLYCOL MONOETHYL ETHER (111-77-3) OTHER LIMIT 30.000PPM - TWA (SUPPLIER RECOMMENDATIONS). DEVELOPMENTAL INFORMATION: THIS MATERIAL (OR ITS COMPONENTS) HAS BEEN SHOWN TO CAUSE BIRTH DEFECTS IN LABORATORY ANIMAL STUDIES. THE RELEVANCE OF THESE FINDINGS TO HUMANS IS UNCERTAIN. OTHER HEALTH EFFECTS: NO DATA.

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

Ecological:NO DATA.

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

=====

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS.

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

Transport Information:DOT INFORMATION - 49 CFR 172.101. DOT

DESCRIPTION: COMBUSTIBLE LIQUID, N.O.S., COMBUSTIBLE LIQUID, NA193, III. CONTAINER/MODE: 55 GAL DRUM/TRUCK PACKAGE. NOS COMPONENT: DIETHYLENE GLYCOL MONOETHYL ETHER. RQ (REPORTABLE QUNTITY)-49 CFR 172.101: NOT APPLICABLE.

=====

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

SARA Title III Information:SARA 302 COMPONENTS-40 CFR 355 APPENDIX A:  
NONE. SECTION 311/312 HAZARD CLASS-40 CFR 370.2: DELAYED, FIRE.  
SARA 313 COMPONENTS-40 CFR 372.65: DIETHYLENE GLYCOL MONOETHYL  
ETHER, 111-77-3, 100.00%.

Federal Regulatory Information:TSCA (TOXIC SUBSTANCE CONTROL ACT)  
STATUS: TSCA (UNITED STATES) THE INTENTIONAL INGREDIENTS OF THIS  
PRODUCT ARE LISTED. CERCLA RQ-40 CFR 302.4(A): NOT LISTED.

S

tate Regulatory Information:CALIFORNIA PROPOSITION 65: NONE. NEW  
JERSEY RTK LABEL INFORMATION AND PENNSYLVANIA RTK LABEL  
INFORMATION: DIETHYLENE GLYCOL MONOMETHYL ETHER, 111-77-3.

===== 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 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.