



An ISO 9001:2000
Certified Company

Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300
or 202-483-7616

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: DIETHYLENE GLYCOL MONOMETHYL ETHER, GLYCOL ETHER DM
This MSDS is valid for all grades and catalog numbers

General Information

Company's Name: PHARMCO PRODUCTS, INC.
Company's Street: 58 VALE RD.
Company's City: BROOKFIELD
Company's State: CT
Company's Zip Code: 06804
Company's Emerg Ph #: (800) 424-9300 Chemtrec
Company's Info Ph #: (203) 740-3471
Date MSDS Revised: Nishant-8/23/99

Safety Data Review Date: 8/23/99
Preparer's Company: PHARMCO PRODUCTS, INC.
Preparer's St Or P. O. Box: 58 VALE RD.
Preparer's City: BROOKFIELD
Preparer's State: CT
Preparer's Zip Code: 06804

Ingredients/Identity Information

Proprietary: NO
Ingredient: ETHYLENE OXIDE (SARA III)
Ingredient Sequence Number: 01
Percent: TRACE
NIOSH (RTECS) Number: KX2450000

CAS Number: 75-21-8
OSHA PEL: 1 PPM; SEE 1910.1047
ACGIH TLV: 1 PPM, A2; 9192
Other Recommended Limit: N/K (FP N/ORNL)

Proprietary: NO
Ingredient: DIETHYLENE GLYCOL
MONOMETHYL ETHER
Ingredient Sequence Number: 02
Percent: >99

NIOSH (RTECS) Number: KL6125000
CAS Number: 111-77-3
OSHA PEL: N/K (FP N/ORNL)
ACGIH TLV: N/K (FP N/ORNL)
Other Recommended Limit: N/K (FP N/ORNL)

Proprietary: NO
Ingredient: EXPLAN OF CARC:ANIM CARC
(NTP,1989).ACGIH A2=SUSP HUM CARC
(1990).KNOWN HUM CARC
(OSHA,1985).KNOWN TO CAUSE (SEE ING 4)

Ingredient Sequence Number: 03
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: N/K (FP N/ORNL)
ACGIH TLV: N/K (FP N/ORNL)
Other Recommended Limit: N/K (FP N/ORNL)

Proprietary: NO
Ingredient: EXPLAN OF CARCIN:CANCER (CAL PROP 65,1987).
Ingredient Sequence Number: 04
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: N/K (FP N/ORNL)
ACGIH TLV: N/K (FP N/ORNL)
Other Recommended Limit: N/K (FP N/ORNL)

Physical/Chemical Characteristics

Appearance And Odor: COLORLESS LIQUID;MILD ODOR.

Boiling Point: 381F,194C
Melting Point: -12F,-24C
Vapor Pressure (MM Hg/70 F): 0.1 MMHG
Vapor Density (Air=1): 4.14,AIR=1
Specific Gravity: 1.023 (WATER=1)
Decomposition Temperature: N/K (FP N)
Evaporation Rate And Ref: <1 (BUTYL ACETATE=1)
Solubility In Water: 100%

Fire and Explosion Hazard Data

Flash Point: 188F,87C	EQUIPMENT (FP N).USE WATER SPRAY TO
Flash Point Method: TCC	COOL NEARBY CONTAINERS AND
Lower Explosive Limit: 1.38%	STRUCTURES
Upper Explosive Limit: 22.7%	EXPOSED TO FIRE.
Extinguishing Media: USE CARBON	Unusual Fire And Expl Hazrds:
DIOXIDE,ALCOHOL FOAM,DRY	NONE.HAZARDOUS DECOMPOSITION
CHEMICAL,WATER	PRODUCTS:MAY
SPRAY.	LIBERATE CARBON MONOXIDE,CARBON
Special Fire Fighting Proc: USE NIOSH/MSHA	DIOXIDE,AND UNIDENTIFIED ORGANIC
APPROVED SCBA & FULL PROTECTIVE	COMPOUNDS
	IN BLACK SMOKE.

Reactivity Data

Stability: YES	CARBON MONOXIDE,CARBON DIOXIDE,
Cond To Avoid (Stability): HEAT,SPARKS,AND	AND UNIDENTIFIED ORGANIC COMPOUNDS
OPEN FLAMES.	IN BLACK SMOKE.
Materials To Avoid: ALKALIS,OXIDIZING	Hazardous Poly Occur: NO
MATERIALS,WATER,AND MOIST AIR.	Conditions To Avoid (Poly): WILL NOT OCCUR.
Hazardous Decomp Products: MAY LIBERATE	

Health Hazard Data

LD50-LC50 Mixture: LD50 RAT ORAL 9210 MG/KG,(SEE SUPP DATA)
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: ETHYLENE OXIDE:KNOWN TO CAUSE REPRODUCTIVE DISORDERS (FEMALE) (CAL PROP 65,1987).INGESTION MAY CAUSE KIDNEY INJURY.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: ETHYLENE OXIDE (TRACE):LTD EVID FOR CARC IN HUMANS;SUFF EVID FOR CARC IN ANIM (IARC,1987).SUSP HUMAN/KNOWN (SEE ING 3)
Signs/Symptoms Of Overexp: EYES:LIQUID AND MIST MAY IRRITATE AND MAY BE PAINFUL.SKIN:IRRITATING AFTER PROLONGED CONTACT.MAY BE ABSORBED THROUGH SKIN BUT VERY LOW IN TOXICITY.INGESTION:SLIGHTLY TOXIC.MAY CAUSE NAUSEA AND NARCOSIS.MAY CAUSE KIDNEY INJURY.INHALATION:MAY CAUSE LETHARGY AND DIARRHEA.
Med Cond Aggravated By Exp: NONE REPORTED
Emergency/First Aid Proc: EYES:IMMED FLUSH W/ LOTS OF RUNNING WATER FOR AT LEAST 15 MIN,LIFT LIDS OCCAS.GET IMMED MED ATTN.SKIN:IMMED WASH W/ LOTS OF SOAP & WATER.REMOVE CONTAM CLTHG/SHOES.GET MED ATTN IF IRRIT PERSISTS.INGEST:IF CONSCIOUS,IMMED INDUCE VOMIT;GIVE 2 GLASSES OF WATER, STICK FINGER DOWN THROAT.GET IMMED MED ATTN.DO NOT GIVE ANYTHING TO AN UNCON/CONVULSING PERSON.INHAL:REMOVE TO FRESH AIR.GIVE ARTF (SEE SUPP)

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: WEAR PROT EQUIP (RUBBER BOOTS/GLOVES/APRON, SCBA IN PRESS DEMAND MODE/SUPPLIED-AIR RESP,EYE PROT).EXTING IGNIT SOURCES. SMALL SPILL-USE FULL FACEPIECE AIR-PURIFYING CARTRIDGE RESP FOR ORG VAP. MOP/WIPE UP,DISPOSE IN DOT-APPRVD CONTR.LRG SPILL-(SEE SUP)

Neutralizing Agent: N/K (FP N/ORNL)

Waste Disposal Method: DISPOSAL MUST BE IAW FEDERAL,STATE, & LOCAL REGS (FP N).DISPOSE OF CONTAM PROD,CLEAN-UP MATLS IN APPROVED MANNER (CONSULT AUTH FOR PROC).EMPTY CONTR HAS RESIDUES,GASES,MISTS;SUBJECT TO PROPER DISP. GLYCOL ETHERS:SARA TITLE III SECTION 313 LISTED.

Precautions-Handling/Storing: STORE IN A COOL,DRY,WELL-VENTED PLACE AWAY FROM INCOMPATIBLE MATLS.KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.DO NOT USE PRESSURE TO EMPTY CONTR.

Other Precautions: WASH THORO AFTER HANDLING.DO NOT GET IN EYES,ON SKIN,ON CLOTHING.KEEP AWAY FROM HEAT,SPARKS,FLAMES.DO NOT CUT,GRIND,WELD,DRILL ON/ NEAR CONTR.CONTR (EVEN EMPTY) RETAINS RESIDUE/VAPORS;OBEY HAZARD WARNINGS, HANDLE EMPTY CONTR AS IF FULL.

Control Measures

Respiratory Protection: WEAR NIOSH-APPROVED RESP APPROP FOR EMISSION LEVELS.APPROP RESP MAY BE FULL FACEPIECE,HALF-MASK AIR-PURIFYING CARTRIDGE RESP EQUIPPED FOR ORGANIC VAPORS/MISTS,SELF-CONTAINED BREATHING APPARATUS IN PRESSURE DEMAND MODE,OR SUPPLIED-AIR RESP.

Ventilation: LOCAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MINIMIZING EMISSIONS AT POINT OF USE.

Protective Gloves: RUBBER

Eye Protection: CHEMICAL GOGGLES

Other Protective Equipment: LONG-SLEEVED SHIRT,TROUSERS,SAFETY SHOES, RUBBER APRON.AN EYEWASH AND SAFETY SHOWER SHOULD BE NEARBY AND READY FOR USE.

Work Hygienic Practices: DO NOT WEAR CONTACT LENSES WHEN WORKING WITH CHEMICALS.WASH CONTAM CLOTHING BEFORE REUSE.WASH THOROUGHLY AFTER HANDLING.

Suppl. Safety & Health Data: LD50-LC50 MIX:RABBIT DERMAL 650 MG/KG.ENTRY RTE:INH/INGEST (FP N);SKIN/EYE CONTACT (MFR).FIRST AID PROC:RESP IF NOT BRTHG.GET IMMED MED ATTN.SPILL PROC:DIKE W/ SOIL/OTHER NONCOMBUST,PUMP/ PLACE INTO APPRVD CONTR;KEEP OUT OF SEWERS,STORM DRAINS,SURF WATERS,SOIL. COMPLY W/ REGS ON SPILL REPORTING/HANDLING/DISPOSAL.

Transportation Data

DOT PSN Code: ZZZ

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

IMO PSN Code: ZZZ

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION

IATA PSN Code: ZZZ

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

AFI PSN Code: ZZZ

AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

Additional Trans Data: NOT REGULATED FOR TRANSPORTATION

Disposal Data

Refer to applicable regional, state and federal codes.

Label Data

Common Name: DIETHYLENE GLYCOL MONOMETHYL ETHER

Signal Word: WARNING!
Acute Health Hazard-Moderate: X

Contact Hazard-Slight: X
Fire Hazard-Moderate: X
Reactivity Hazard-None: X
Special Hazard Precautions: WARNING!
FLAMMABLE LIQUID ACUTE:LIQUID AND
MIST MAY IRRITATE EYES AND BE
PAINFUL.MAY BE ABSORBED THROUGH
SKIN BUT VERY
LOW IN TOXICITY.SLIGHTLY TOXIC BY
INGESTION; MAY CAUSE
NAUSEA,NARCOSIS,AND

KIDNEY INJURY.INHALATION MAY CAUSE
LETHARGY AND DIARRHEA.
CHRONIC:ETHYLENE
OXIDE: KNOWN TO CAUSE REPRODUCTIVE
DISORDERS (FEMALE) (CAL PROP
65,1987).IRRITATES SKIN AFTER PROLONGED
CONTACT.CANCER HAZARD:CONTAINS
MATERIAL WHICH CAN CAUSE CANCER.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y

The information contained herein is based on data considered to be accurate. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use of the product.