



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 MONOBUTYL ETHER
This MSDS is valid for all grades and catalog numbers

General Information

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

Ingredients/Identity Information

Ingredient: DIETHYLENE GLYCOL MONOBUTYL ETHER	CAS Number: 112-34-5
Ingredient Sequence Number: 01	OSHA PEL: NOT ESTABLISHED
Percent: 100	ACGIH TLV: NOT ESTABLISHED
NIOSH (RTECS) Number: KJ9100000	Other Recommended Limit: NOT ESTABLISHED

Physical/Chemical Characteristics

Appearance And Odor: TRANSPARENT COLORLESS LIQUID, MILD AND CHARACTERISTIC ODOR	Vapor Density (Air=1): 5.6
Boiling Point: 447F,231C	Specific Gravity: 0.9536
Melting Point: -91F FZ PT	Evaporation Rate And Ref: <0.01 (BUTYL ACETATE=1)
Vapor Pressure (MM Hg/70 F): <0.1	Solubility In Water: COMPLETE
	Percent Volatiles By Volume: 100
	Autoignition Temperature: 442F

Fire and Explosion Hazard Data

Flash Point: 214F,101C	Special Fire Fighting Proc: FIREFIGHTERS, USE SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE EQUIPMENT.
Flash Point Method: TCC	Unusual Fire And Expl Hazrds: THIS MATERIAL HAS A RELATIVELY LOW AUTOIGNITION TEMPERATURE: 442F.
Lower Explosive Limit: 0.9	
Upper Explosive Limit: 5.9	
Extinguishing Media: APPLY ALCOHOL-TYPE OR ALL PURPOSE TYPE FOAM FOR LARGE FIRES. USE CARBON DIOXIDE OR DRY CHEMICAL FOR SMALL FIRES.	

Reactivity Data

Stability: YES
Cond To Avoid (Stability): DO NOT DISTILL TO DRYNESS. AVOID EXCESSIVE TEMPERATURE OR PROLONGED REFLUX.
Materials To Avoid: AVOID STRONG ALKALI, ACIDS, OXIDIZING AGENTS,

Hazardous Decomp Products: CARBON DIOXIDE, CARBON MONOXIDE.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT APPLICABLE

Health Hazard Data

LD50-LC50 Mixture: LD50 (ORAL RAT) IS UNKNOWN
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: ACUTE: SWALLOWING-SLIGHTLY TOXIC. SKIN-BRIEF CONTACT IS NOT IRRITATING. EYE-CAUSES SEVERE IRRITATION.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NONE OF THE CHEMICALS IN THIS PRODUCT IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.
REDNESS AND SWELLING ON PROLONGED CONTACT. INHALATION: NAUSEA, DIZZINESS. INGESTION: INCOORDINATION, DIZZINESS, DROWSINESS, HEADACHE, NAUSEA, MENTAL CONFUSION, SLURRED SPEECH, STUPOR.
Med Cond Aggravated By Exp: OVEREXPOSURE IS UNLIKELY TO AGGRAVATE EXISTING MEDICAL CONDITIONS.
Emergency/First Aid Proc: EYES:FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.SEE OPHTHALMOLOGIST URGENTLY. SKIN:WASH WITH SOAP AND PLENTY OF WATER WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.SEE DOCTOR.
INHALATION:REMOVE TO FRESH AIR.IF NOT BREATHING,GIVE ARTIFICIAL GIVE LARGE AMOUNTS OF WATER.INDUCE VOMITING.SEE DOCTOR.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: SMALL SPILLS CAN BE FLUSHED WITH LARGE AMOUNTS OF WATER; LARGER SPILLS SHOULD BE COLLECTED FOR DISPOSAL. WEAR SUITABLE PROTECTIVE EQUIPMENT.
Neutralizing Agent: NOT APPLICABLE
Waste Disposal Method: INCINERATE IN A FURNACE WHERE PERMITTED UNDER FEDERAL, STATE, AND LOCAL REGULATIONS. AT VERY LOW CONCENTRATIONS IN WATER, THIS PRODUCT IS BIODEGREDABLE IN A BIOLOGICAL WASTEWATER TREATMENT PLANT.
Precautions-Handling/Storing: DANGER! CAUSES EYE BURNS. DO NOT GET IN EYES. KEEP CONTAINERS CLOSED. AVOID BREATHING VAPOR. USE WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.
Other Precautions: PROCESS HAZARD: SUDDEN RELEASE OF HOT ORGANIC CHEMICAL VAPORS FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE AND PRESSURE, MAY RESULT IN IGNITION.

Control Measures

Respiratory Protection: NONE EXPECTED TO BE NEEDED.
Ventilation: GENERAL (MECHANICAL) ROOM VENTILATION IS EXPECTED TO BE SATISFACTORY.
Protective Gloves: PVC-COATED.
Eye Protection: MONOGOGGLES.
Other Protective Equipment: EYE BATH, SAFETY SHOWER.
Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Suppl. Safety & Health Data: NONE.

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
MMAC Code: NR

Disposal Data

Refer to applicable regional, state and federal codes.

Label Data

Chronic Hazard: YES
Signal Word: CAUTION!
Acute Health Hazard-Slight: X
Contact Hazard-Slight: X
Fire Hazard-Slight: X
Reactivity Hazard-None: X
Special Hazard Precautions: AVOID BREATHING
VAPOR. USE WITH ADEQUATE
VENTILATION. FOR INDUSTRIAL USE ONLY.
IN CASE OF SPILL: SMALL SPILLS CAN BE
FLUSHED WITH LARGE AMOUNTS OF
WATER; LARGER SPILLS SHOULD BE
COLLECTED FOR

DISPOSAL. WEAR SUITABLE PROTECTIVE
EQUIPMENT. FIRST AID: EYES:FLUSH WITH
WASH WITH SOAP AND PLENTY OF WATER
WHILE REMOVING CONTAMINATED
CLOTHING AND
SHOES.SEE DOCTOR. INHALATION:REMOVE
TO FRESH AIR.IF NOT BREATHING,GIVE
ARTIFICIAL RESPIRATION.IF BREATHING IS
DIFFICULT,GIVE OXYGEN.SEE DOCTOR.
INGESTION: GIVE LARGE AMOUNTS OF
WATER.INDUCE VOMITING.SEE DOCTOR.
Protect Eye: X
Protect Skin: X

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.