



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

## MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: DICHLOROETHANE  
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 #: (203) 740-3471  
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: ETHANE, 1,2-DICHLORO;(1,2 DICHLOROETHANE) (SARA III)  
Ingredient Sequence Number: 01  
Percent: 90-100

NIOSH (RTECS) Number: KI0525000  
CAS Number: 107-06-2  
OSHA PEL: 50 PPM/C,100PPM  
ACGIH TLV: 10 PPM; 9293

### Physical/Chemical Characteristics

Appearance And Odor: CLEAR LIQUID WITH SWEET ODOR LIKE CHLOROFORM  
Boiling Point: 183F,84C  
Melting Point: -33F,-36C  
Vapor Pressure (MM Hg/70 F): 62  
Vapor Density (Air=1): 3.4

Specific Gravity: 1.25 (H2O=1)  
Evaporation Rate And Ref: 0.27 (BUTYL ACETATE=1)  
Solubility In Water: SLIGHT (0.1-1%)  
Percent Volatiles By Volume: 100

### Fire and Explosion Hazard Data

Flash Point: 55.4F,13.0C  
Flash Point Method: CC  
Lower Explosive Limit: 6.2%

Upper Explosive Limit: 15.6%

Extinguishing Media: USE ALCOHOL FOAM, DRY CHEMICAL OR CARBON DIOXIDE.  
WATER MAY BE INEFFECTIVE.

Special Fire Fighting Proc: WEAR NIOSH/MSHA APPRVD PRESS DEMAND SCBA &  
FULL PROT EQUIP (FP N). MOVE CONTAINERS FROM FIRE AREA IF IT CAN BE DONE W/  
OUT RISK. USE WATER TO KEEP FIRE (SUPDAT)

Unusual Fire And Expl Hazrds: VAPS MAY FLOW ALONG SURFS TO DISTANT IGNIT  
SOURCES & FLASH BACK. CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE.  
CONTACT WITH STRONG OXIDIZERS MAY (SUPP DATA)

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#### Reactivity Data

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Stability: YES

Cond To Avoid (Stability): HEAT, SOURCES  
OF IGNITION, FLAME.

Materials To Avoid: STRONG OXIDIZING  
AGENTS.

Hazardous Decomp Products: HCL.  
PHOSGENE (FP N).

Hazardous Poly Occur: NO  
Conditions To Avoid (Poly): NOT  
RELEVANT.

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#### Health Hazard Data

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LD50-LC50 Mixture: LD50:(ORAL RAT) 670 MG/KG.

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: NO

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: VAPORS MAY BE IRRITATING TO SKIN, EYES, NOSE  
& THROAT. INHALATION OF VAPORS MAY CAUSE NAUSEA, VOMITING, HEADACHE, OR  
LOSS OF CONSCIOUSNESS. CHRONIC:MAY INCLUDE KIDNEY AND/OR LIVER DAMAGE.  
CHLOROCARBON MATERIALS HAVE PRODUCED SENSITIZATION OF THE MYOCARDIUM  
TO

EPINEPHRINE IN LAB ANIMALS AND COULD (EFTS OF OVEREXPOSURE)

Carcinogenicity - NTP: YES

Carcinogenicity - IARC: YES

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: ETHYLENE DICHLORIDE:GROUP 2 (NTP), GROUP 2B  
(IARC)

Signs/Symptoms Of Overexp: HLTH HAZ:HAVE A SIMILAR EFFECT IN HUMANS.  
ADRENOMIMETICS (E.G., EPINEPHRINE) MAY BE CONTRA-INDICATED EXCEPT FOR LIFE  
SUSTAINING USES IN HUMANS ACUTELY OR CHRONICALLY EXPOSED TO  
CHLOROCARBONS  
(FP N).

Med Cond Aggravated By Exp: NONE IDENTIFIED.

Emergency/First Aid Proc: CALL MD. INGEST:IF CONSCIOUS, IMMEDIATELY INDUCE  
VOMITING. INHAL:MOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL  
RESPIRATION. IF BREATHING DIFFICULT, GIVE OXYGEN. EYE:IMMEDIATELY FLUSH  
WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SKIN:FLUSH WITH WATER.

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#### Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: WEAR NIOSH/MSHA APPRVD SCBA & FULL PROT  
CLTHG. SHUT OFF IGNIT SOURCES; NO FLARES, SMKNG OR FLAMES IN AREA. STOP  
LEAK IF YOU CAN DO SO W/OUT RISK. USE WATER SPRAY TO REDUCE VAPS. TAKE UP  
W/SAND OR OTHER NON-COMBUST ABSORB MATL & PLACE INTO (SUPP DATA)

Neutralizing Agent: SOLVENT ABSORBANT IS RECOMMENDED FOR SPILLS OF THIS PRODUCT.

Waste Disposal Method: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

Precautions-Handling/Storing: KEEP AWAY FROM HEAT, SPARKS, FLAME. KEEP IN TIGHTLY CLOSED CONTAINER. USE W/ADEQUATE VENTILATION. STORE IN COOL, DRY, WELL-VENT, FLAMM LIQ STOR AREA.

Other Precautions: AVOID CONTACT WITH EYES, SKIN & CLOTHING. AVOID BREATHING VAPOR. BOND & GROUND CONTAINERS WHEN TRANSFERRING LIQUID. NO SMOKING IN AREA OF USE. DO NOT USE IN GEN VICIN OF ARC WELDING, OPEN FLAMES OR HOT SURFS. HEAT &/OR UV RADIA MAY (SUPDAT)

Control Measures

Respiratory Protection: RESPIRATORY PROTECTION REQUIRED IF AIRBORNE CONCENTRATION EXCEEDS TLV. AT CONCENTRATIONS ABOVE 10 PPM, A NIOSH/MSHA APPROVED SCBA IS ADVISED.

Ventilation: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV REQUIREMENTS.

Protective Gloves: NEOPRENE GLOVES.

Eye Protection: CHEM WORK GOGG/FULL LENGTH FSHLD (FP N).

Other Protective Equipment: UNIFORM AND PROTECTIVE SUIT.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING.

Suppl. Safety & Health Data: FIRE FIGHT PROC:EXPOSED CONTAINERS COOL.

EXPLO HAZ:CAUSE FIRE. THERMAL DECOMP PRODUCTS MAY INCLUDE HCL & PHOSGENE (FP N). SPILL PROC:CONTAINER FOR LATER DISPOSAL. FLUSH AREA WITH WATER.

OTHER PREC:CAUSE THE FORMATION OF HCL AND PHOSGENE (FP N).

Transportation Data

Trans Data Review Date: 92349

DOT PSN Code: GAP

DOT Proper Shipping Name: ETHYLENE DICHLORIDE

DOT Class: 3

DOT ID Number: UN1184

DOT Pack Group: II

DOT Label: FLAMMABLE LIQUID, POISON

IMO PSN Code: GVF

IMO Proper Shipping Name: ETHYLENE DICHLORIDE

IMO Regulations Page Number: 3224

IMO UN Number: 1184

IMO UN Class: 3.2

IMO Subsidiary Risk Label: TOXIC \*

IATA PSN Code: LIA

IATA UN ID Number: 1184

IATA Proper Shipping Name: ETHYLENE DICHLORIDE

IATA UN Class: 3

IATA Subsidiary Risk Class: 6.1

IATA Label: FLAMMABLE LIQUID & TOXIC \*

AFI PSN Code: LIA

AFI Symbols: T

AFI Prop. Shipping Name: ETHYLENE DICHLORIDE

AFI Class: 3

AFI ID Number: UN1184

AFI Pack Group: II

AFI Label: FLAMMABLE LIQUID & POISON

AFI Basic Pac Ref: 7-7

Disposal Data

Refer to applicable regional, state and federal codes.

### Label Data

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Label Required: YES  
Technical Review Date: 06MAY92  
Label Date: 06MAY92  
Label Status: G  
Common Name: H076, 1,2-DICHLOROETHANE  
Chronic Hazard: YES  
Signal Word: DANGER!  
Acute Health Hazard-Severe: X  
Contact Hazard-Moderate: X  
Fire Hazard-Severe: X  
Reactivity Hazard-Slight: X  
Special Hazard Precautions: FLAMMABLE LIQUID! STORE IN A COOL, DRY, WELL VENTILATED, FLAMMABLE LIQUID STORAGE AREA. KEEP AWAY FROM HEAT, SPARKS,

FLAME. ACUTE: VAPORS MAY BE IRRITATING TO SKIN, EYES, NOSE AND THROAT.  
INHALATION OF VAPORS MAY CAUSE NAUSEA, VOMITING, HEADACHE, OR LOSS OF CONSCIOUSNESS. CHRONIC EFFECTS OF OVEREXPOSURE MAY INCLUDE KIDNEY AND/OR LIVER DAMAGE. CHLOROCARBON MATERIALS HAVE CAUSED SENSITIZATION OF THE MYOCARDIUM TO EPINEPHRINE IN LAB ANIMALS AND COULD HAVE A SIMILAR EFFECT IN HUMANS. DICHLOROETHANE IS A LISTED CARCINOGEN.  
Protect Eye: Y  
Protect Skin: Y

Protect Respiratory: Y

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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.