

An ISO 9001:2000  
Certified Company



THE POWER OF THREE<sup>3</sup>

**PHARMCO-AAPER**  
AND COMMERCIAL ALCOHOLS

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

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## MATERIAL SAFETY DATA SHEETS

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Part Number/Trade Name: DICHLOROETHANE  
This MSDS is valid for all grades that start with catalog number 312

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### General Information

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Manufacturer:	PHARMCO-AAPER	
	58 Vale Road	1101 Isaac Shelby Drive
	Brookfield, CT 06804	Shelbyville, KY 40065
	Phone (203) 740-3471	Phone (502) 633-0650
	Fax (203) 740-3481	Fax (502) 633-0685

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### Ingredients/Identity Information

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Proprietary: NO	NIOSH (RTECS) Number: KI0525000
Ingredient: ETHANE, 1,2-DICHLORO;(1,2 DICHLOROETHANE) (SARA III)	CAS Number: 107-06-2
Ingredient Sequence Number: 01	OSHA PEL: 50 PPM/C,100PPM
Percent: 90-100	ACGIH TLV: 10 PPM; 9293

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### Physical/Chemical Characteristics

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Appearance And Odor: CLEAR LIQUID WITH SWEET ODOR LIKE CHLOROFORM	Specific Gravity: 1.25 (H2O=1)
Boiling Point: 183F,84C	Evaporation Rate And Ref: 0.27 (BUTYL ACETATE=1)
Melting Point: -33F,-36C	Solubility In Water: SLIGHT (0.1-1%)
Vapor Pressure (MM Hg/70 F): 62	Percent Volatiles By Volume: 100
Vapor Density (Air=1): 3.4	

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### Fire and Explosion Hazard Data

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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)

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### Control Measures

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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).

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#### Transportation Data

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Trans Data Review Date: 92349	IATA UN ID Number: 1184
DOT PSN Code: GAP	IATA Proper Shipping Name: ETHYLENE DICHLORIDE
DOT Proper Shipping Name: ETHYLENE DICHLORIDE	IATA UN Class: 3
DOT Class: 3	IATA Subsidiary Risk Class: 6.1
DOT ID Number: UN1184	IATA Label: FLAMMABLE LIQUID & TOXIC *
DOT Pack Group: II	AFI PSN Code: LIA
DOT Label: FLAMMABLE LIQUID, POISON	AFI Symbols: T
IMO PSN Code: GVF	AFI Prop. Shipping Name: ETHYLENE DICHLORIDE
IMO Proper Shipping Name: ETHYLENE DICHLORIDE	AFI Class: 3
IMO Regulations Page Number: 3224	AFI ID Number: UN1184
IMO UN Number: 1184	AFI Pack Group: II
IMO UN Class: 3.2	AFI Label: FLAMMABLE LIQUID & POISON
IMO Subsidiary Risk Label: TOXIC *	AFI Basic Pac Ref: 7-7
IATA PSN Code: LIA	

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#### Disposal Data

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Refer to applicable regional, state and federal codes.

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#### Label Data

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Label Required: YES	VENTILATED, FLAMMABLE LIQUID STORAGE AREA. KEEP AWAY FROM HEAT, SPARKS,
Technical Review Date: 06MAY92	FLAME. ACUTE:VAPORS MAY BE IRRITATING TO SKIN, EYES, NOSE AND THROAT.
Label Date: 06MAY92	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
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	

MYOCARDIUM TO EPINEPHRINE IN LAB ANIMALS AND COULD HAVE A SIMILAR EFFECT IN

Protect Respiratory: Y

HUMANS. DICHLOROETHANE IS A LISTED CARCINOGEN.

Protect Eye: Y

Protect Skin: Y

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#### Regulatory Data

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Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are:

Chemical Name	CAS Number	RQ
1,2-Dichloroethane	107-06-2	100lb

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: **Dichloroethane**

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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.