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Certified Company



THE POWER OF THREE³

PHARMCO-AAPER

AND COMMERCIAL ALCOHOLS

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

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: PENTANE
This MSDS is valid for all grades that start with catalog number 364

General Information

Manufacturer:	Pharmco Products Inc. 58 Vale Road Brookfield, Connecticut 06804, USA Phone (203) 740-3471 Fax (203) 740-3481	1101 Isaac Shelby Drive Shelbyville, KY 40065 Phone (502) 633-0650 Fax (502) 633-0685
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Ingredients/Identity Information

Ingredient: PENTANE	CAS Number: 109-66-0
Ingredient Sequence Number: 01	OSHA PEL: 1000 PPM/750 STEL
NIOSH (RTECS) Number: RZ9450000	ACGIH TLV: 600 PPM/750STEL;9293

Physical/Chemical Characteristics

Appearance And Odor: CLEAR, COLORLESS LIQUID WITH A MILD HYDROCARBON ODOR.	Vapor Density (Air=1): 2.5
Boiling Point: 96.9F,36.1C	Specific Gravity: SUPP DATA
Vapor Pressure (MM Hg/70 F): 420 @ 20C	Evaporation Rate And Ref: CA 29 (BUAC=1)
	Solubility In Water: 0.04% @ 20C
	Percent Volatiles By Volume: CA 100

Fire and Explosion Hazard Data

Flash Point: -40F,-40C
Flash Point Method: TCC
Lower Explosive Limit: 1.5%
Upper Explosive Limit: 7.8%
Extinguishing Media: CARBON DIOXIDE, DRY CHEMICAL OR FOAM.
Special Fire Fighting Proc: WEAR NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP
(FP N).WATER WILL NOT BE EFTIVE IN EXTING FIRE & MAY SPREAD IT,BUT WATER
SPRAY CAN BE USED TO COOL EXPOSED CNTNRS.
Unusual Fire And Expl Hazrds: HEAT WILL BUILD PRESSURE AND MAY RUPTURE
CLOSED STORAGE CONTAINERS.

Reactivity Data

Stability: YES
Cond To Avoid (Stability): HEAT, SPARKS, OPEN FLAME, OPEN CONTAINERS, AND
POOR VENTILATION.

Materials To Avoid: STRONG OXIDIZING AGENTS.
Hazardous Decomp Products: INCOMPLETE COMBUSTION CAN GENERATE CARBON MONOXIDE AND OTHER TOXIC VAPORS.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT RELEVANT

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: PENTANE IS A MILD EYE AND MUCOUS MEMBRANE IRRITANT, PRIMARY SKIN IRRITANT, AND CENTRAL NERVOUS SYSTEM DEPRESSANT. ACUTE: EXPOSURE IRRITATES THE EYES AND RESPIRATORY TRACT. EXTREME EXPOSURE CAN CAUSE DERMATITIS.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NOT RELEVANT
Signs/Symptoms Of Overexp: INHAL: EXPOSURE CAN CAUSE DIZZINESS, HEADACHE, NAUSEA, AND NARCOSIS. EYE: LIQUID AND HIGH VAPOR CONCENTRATION CAN BE IRRITATING. SKIN: PROLONGED OR REPEATED SKIN CONTACT CAN CAUSE IRRITATION AND DERMATITIS THROUGH DEFATTING OF SKIN. INGEST: CAN CAUSE GASTROINTESTINAL TRACT DISCOMFORT.
Med Cond Aggravated By Exp: PRECLUDE FROM EXPOSURE THOSE INDIVIDUALS SUSCEPTIBLE TO DERMATITIS.
Emergency/First Aid Proc: INHAL:IMMED REMOVE TO FRESH AIR. IF NOT BRTHG, ADMIN MOUTH-TO-MOUTH RESCUE BRTHG. IF THERE IS NO PULSE ADMIN CPR. CONT MD IMMED. EYE: RINSE W/COPIOUS AMTS OF WATER FOR @ LST 15 MINS. GET EMER MED ASSISTANCE. SKIN:FLUSH THORO FOR @ LST 15 MINS. WASH AFFECTED AFFECTED SKIN W/SOAP & WATER. REMOVE CONTAMD CLTHG & SHOES. WASH CLTHG BEFORE RE-USE, & DISCARD CONTAMD SHOES. GET EMER MED (SUPP DATA)

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: PROT FROM IGNIT.WEAR PROT CLTHG & USE NIOSH/MSHA APPRVD RESP EQUIP.ABSORB SPILLED MATL IN ABSORB RECD FOR SOLV SPILLS & REMOVE TO SAFE LOCATION FOR DISP BY APPRVD METHS.IF RELEASED TO ENVIRON, COMPLY W/ALL REGULATORY NOTIFICATION REQMTS. (SUPP DATA)
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DIPOSE OF PENTANE AS AN EPA HAZ WASTE. CONTACT STATE ENVIRON AGENCY FOR LISTING OF LICENSED HAZARDOUS WASTE DISPOSAL FACILITIES AND APPLICABLE REGULATIONS. HAZARDOUS WASTE NUMBER: D001 (IGNITABLE). DISPOSE OF I/A/W FED, STATE AND LOCAL REGS (FP N).
Precautions-Handling/Storing: PENTANE SHLD BE PROTECTED FROM TEMP EXTREMES & DIRECT SUNLIGHT.PROPER STOR OF PENTANE MUST BE DETERM BASED ON OTHER MATLS STORED & THEIR (ING 5)
Other Precautions: GROUND AND BOND METAL CONTAINERS TO MINIMIZE STATIC SPARKS. STOR OF PENTANE UNDER HOT CNDTNS (>36C) WILL CAUSE BOILING OF LIQ. IF CNTNR IS OPENED BEFORE ALLOWING LIQ TO COOL TO ROOM TEMP (22C), THE LIQ COULD BOIL OVER OUT OF THE CONTAINER.

Control Measures

Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRATOR EQUIPMENT. FOLLOW NIOSH AND EQUIPMENT MFR'S RECOMMENDATIONS TO DETERMINE APPROPRIATE EQUIPMENT (AIR-PURIFYING, AIR-SUPPLIED, OR SCBA).
 Ventilation: ADEQ VENT IS REQD TO PROT PERS FROM EXPOS TO CHEM VAPS EXCEEDING PEL & TO MINIMIZE FIRE HAZ. THE CHOICE OF (SUPP DATA)
 Protective Gloves: NEOPRENE OR NITRILE RUBBER GLOVES.
 Eye Protection: CHEM WORK GOG/FULL LGTH FSHLD (FP N).
 Other Protective Equipment: EMER EYEWASH FOUNTAINS & SAFETY SHOWERS SHLD BE AVAILABLE IN VICINITY OF ANY POTENTIAL EXPOS. PROTECTIVE (ING 2)
 Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
 Suppl. Safety & Health Data: SPEC GRAV:0.626 @ 20C (H*2O=1).FIRST AID PROC:ASSISTANCE. INGEST:CALL LOC POISON CONTROL CENTER FOR ASSISTANCE. CONT MD IMMED. ASPIR HAZ - DO NOT INDUCE VOMIT. SPILL PROC: CERCLA REPORTABLE QUANTITY - 5,000 LBS. VENT: VENT EQUIP, EITHER LOC/GEN, WILL DEPEND ON CNDTNS OF USE, QTY OF MATL & OTHER OPERATING PARAMETERS.

Transportation Data

Trans Data Review Date: 93096	IATA PSN Code: TAU
DOT PSN Code: LHZ	IATA UN ID Number: 1265
DOT Proper Shipping Name: PENTANES *	IATA Proper Shipping Name: PENTANES, *
DOT Class: 3	IATA UN Class: 3
DOT ID Number: UN1265	IATA Label: FLAMMABLE LIQUID
DOT Pack Group: I	AFI PSN Code: TAU
DOT Label: FLAMMABLE LIQUID	AFI Prop. Shipping Name: N- PENTANE OR ISOPENTANE *
IMO PSN Code: LGJ	AFI Class: 3
IMO Proper Shipping Name: PENTANES	AFI ID Number: UN1265
IMO Regulations Page Number: 3140	AFI Pack Group: I
IMO UN Number: 1265	AFI Label: FLAMMABLE LIQUID
IMO UN Class: 3.1	AFI Basic Pac Ref: 7-6
IMO Subsidiary Risk Label: -	

Disposal Data

Refer to applicable regional, state and federal codes.

Label Data

Label Required: YES	FLAME. ACUTE: INHALATION CAN CAUSE DIZZINESS, HEADACHE, NAUSEA AND NARCOSIS. SWALLOWING CAN CAUSE GASTROINTESTINAL TRACT DISCOMFORT. CAN CAUSE EYE AND SKIN IRRITATION. CAN CAUSE DERMATITIS. CHRONIC: NONE LISTED BY MANUFACTURER.
Common Name: PENTANE	Protect Eye: Y
Chronic Hazard: NO	Protect Skin: Y
Signal Word: DANGER!	Protect Respiratory: Y
Acute Health Hazard-Moderate: X	
Contact Hazard-Moderate: X	
Fire Hazard-Severe: X	
Reactivity Hazard-None: X	
Special Hazard Precautions: FLAMMABLE. KEEP AWAY FROM HEAT, SPARKS AND	

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA): No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.

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.