

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

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: HEPTANE, 96.0% min n-Heptane This MSDS is valid for catalog numbers of n-Heptane – 391000DIS,39100HPR,39100HPLC General Information ______ Company's Name: PHARMCO PRODUCTS, Safety Data Review Date: 01/02/02 Preparer's Company: PHARMCO PRODUCTS, Company's Street: 58 VALE RD. 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 #: (203) 740-3471 Preparer's Zip Code: 06804 Company's Info Ph #: (203) 740-3471 Date MSDS Revised: PS 01/02/02 ______ === Ingredients/Identity Information ______ CAS Number: 142-82-5 Ingredient: N-HEPTANE (96.0% min.) Balance, Heptane Isomers OSHA PEL: 500 PPM ACGIH TLV: 400 PPM/500STEL;9394 Ingredient Sequence Number: 01 Percent: 100 Other Recommended Limit: NONE NIOSH (RTECS) Number: MI7700000 RECOMMENDED _____ Physical/Chemical Characteristics ______ Appearance And Odor: COLORLESS LIQUID. Decomposition Temperature: UNKNOWN Boiling Point: 208F,98C Evaporation Rate And Ref: 2.8 (BUTYL Melting Point: -132F,-91C ACETATE = 1Vapor Pressure (MM Hg/70 F): 40 Solubility In Water: NEGLIGIBLE;0.005% Percent Volatiles By Volume: 100 Vapor Density (Air=1): 3.4 Specific Gravity: 0.68 Autoignition Temperature: 399F _____ _____ Fire and Explosion Hazard Data ______

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Flash Point: 25.0F,-3.9C Flash Point Method: CC Lower Explosive Limit: 1.35 Upper Explosive Limit: 6.7

Extinguishing Media: USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL. USE WATER WITH CAUTION. HEPTANE CAN FLOAT ON WATER AND REIGNITE. Special Fire Fighting Proc: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED **CONTAINERS**

WITH WATER SPRAY.

Unusual Fire And Expl Hazrds: COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. VAPORS HEAVIER THAN AIR. CAN

TRAVEL A LONG DISTANCE AND FLASHBACK.

Reactivity Data

Stability: YES PHOSPHOROUS.

Cond To Avoid (Stability): HIGH HEAT, SPARKS, OPEN FLAMES AND OTHER SOURCES OF IGNITION Hazardous Decomp Products: CARBON MONOXIDE, CARBON DIOXIDE,

INCOMPLETELY SOURCES OF IGNITION

Materials To Avoid: STRONG OXIDIZING
AGENTS, ACIDS,LIQUID CHLORINE,RED
BURNED CARBON PROI
Hazardous Poly Occur: NO BURNED CARBON PRODUCTS.

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Health Hazard Data

Route Of Entry - Inhalation: YES Route Of Entry - Skin: YES Route Of Entry - Ingestion: NO

Health Haz Acute And Chronic: INHAL:ABOVE 5000PPM MAY CAUSE ASPHYXIATION, MAY CAUSE IRRITATION.SKIN ABSORPTION MAY OCCUR.PROLONGED EXPOSURE MAY

CAUSE

DEFATTING.EYES:MAY CAUSE IRRITATION.INGEST:GI IRRITANT.MAY CAUSE CNS DEPRESSION. VOMITING AFTER INGEST MAY CAUSE DEATH.

Carcinogenicity - NTP: NO Carcinogenicity - IARC: NO Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NONE OF THE INGREDIENTS IN THIS PRODUCT IS

LISTED BY NTP, IARC OR OSHA AS A CARCINOGEN.

HEADACHE, GIDDINESS, NARCOSIS, GASOLINE-LIKE TASTE IN MOUTH.INGEST: ABDOMINAL PAIN, NAUSEA, VOMITING, DIARRHEA. ASPIRATION OF C6-8 ALIPHATIC HYDROCARBONS

CAUSED IMMEDIATE DEATH DUE TO LUNG AND HEART FAILURE.

Med Cond Aggravated By Exp: INDIVIDUALS WITH A HISTORY OF SKIN AND RESPIRATORY DISORDERS MAY BE AT INCREASED RISK FROM EXPOSURE. Emergency/First Aid Proc: EYES/SKIN: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEE DOCTOR. INHALATION: REMOVE

DRINK 1 OR 2 GLASSES OF MILK OR WATER . DO NOT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: REMOVE PERSONNEL. ELIMINATE IGNITION SOURCES. VENTILATE AREA. WEAR PROTECTIVE CLOTHING AND EQUIPMENT. ABSORB IN INERT MATERIAL AND PLACE IN APPROPIATE DISPOSAL CONTAINER AND COVER.

Neutralizing Agent: NONE

Waste Disposal Method: CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER. DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

MANFUFACTURER RECOMMENDS INCINERATION.EPA CODE D001.

Precautions-Handling/Storing: STORE IN COOL, DRY, WELL VENTILATED AREA.

PROTECT FROM PHYSICAL DAMAGE, HEAT, IGNITION SOURCES AND INCOMPATIBLE

MATERIALS. KEEP CONTAINERS CLOSED.

Other Precautions: MATERIAL IS EXTREMELY FLAMMABLE. VAPORS MAY IGNITE EXPLOSIVELY. PREVENT BUILDUP OF VAPORS. EMPTY CONTAINERS RETAIN RESIDUE, TREAT AS IF THEY WERE FULL. AVOID EYE AND SKIN CONTACT. DO NOT BREATHE VAPORS. GROUND AND BOND CONTAINERS.

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Control Measures

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Respiratory Protection: NIOSH/MSHA-APPROVED RESPIRATOR OR SCBA AS

APPROPIATE FOR EXPOSURE OF CONCERN.

Ventilation: MECHANICAL (GENERAL) VENTILATION OR LOCAL EXHAUST VENTILATION

TO KEEP EXPOSURE LEVELS BELOW PEL. USE EXPLOSION-PROOF EQ.

Protective Gloves: RUBBER GLOVES.

Eye Protection: CHEMICAL SAFETY GOGGLES.

Other Protective Equipment: PROTECTIVE CLOTHING AS REQUIRED TO MINIMIZE EXPOSURE FROM PROLONGED OR REPEATED CONTACT. EYE BATH AND SAFETY SHOWER.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Suppl. Safety & Health Data: NONE.

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Transportation Data

Trans Data Review Date: 94130

DOT PSN Code: HAD

DOT Proper Shipping Name: HEPTANES

DOT Class: 3

DOT ID Number: UN1206 DOT Pack Group: II

DOT Label: FLAMMABLE LIQUID

IMO PSN Code: HXF

IMO Proper Shipping Name: HEPTANES

IMO Regulations Page Number: 3235

IMO UN Number: 1206 IMO UN Class: 3.2

IMO Subsidiary Risk Label: - IATA PSN Code: NDD

IATA UN ID Number: 1206

IATA Proper Shipping Name: HEPTANES

IATA UN Class: 3

IATA Label: FLAMMABLE LIQUID

AFI PSN Code: NDD

AFI Prop. Shipping Name: HEPTANES

AFI Class: 3

AFI ID Number: UN1206

AFI Pack Group: II

AFI Label: FLAMMABLE LIQUID

AFI Basic Pac Ref: 7-7 MMAC Code: NR

Additional Trans Data: NONE

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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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Common Name: HEPTANE Signal Word: WARNING! Acute Health Hazard-Moderate: X Contact Hazard-Slight: X

Fire Hazard-Moderate: X
Reactivity Hazard-None: X

Special Hazard Precautions: INHAL:ABOVE 5000PPM MAY CAUSE ASPHYXIATION,

MAY CAUSE IRRITATION.SKIN ABSORPTION MAY OCCUR.PROLONGED EXPOSURE MAY

CAUSE

DEFATTING.EYES:MAY CAUSE IRRITATION.INGEST:GI IRRITANT.MAY CAUSE CNS FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEE DOCTOR. INHALATION: REMOVE VICTIM TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DRINK 1 OR 2 GLASSES OF MILK OR WATER. DO NOT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY.

Protect Eye: Y Protect Skin: 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.