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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

Product Name: n-Heptane 99%, n-Heptane 96%
Synonyms: Dipropyl methane, Heptyl Hydride
This MSDS is valid for catalog numbers of n-Heptane

General Information

Manufacturer: PHARMCO-AAPER

58 Vale Road
Brookfield, CT 06804
Phone (203) 740-3471
Fax (203) 740-3481

1101 Isaac Shelby Drive
Shelbyville, KY 40065
Phone (502) 633-0650
Fax (502) 633-0685

Ingredients/Identity Information

Ingredient: HEPTANE
CAS Number: 142-82-5
Percent: 90-100
NIOSH (RTECS) Number: MI7700000

OSHA PEL: 500 PPM
ACGIH TLV: 400 PPM/500STEL; 9394
Other Recommended Limit: NONE
RECOMMENDED

Physical/Chemical Characteristics

Appearance: Clear, Colorless Liquid.
Odor: Mild, Gasoline-Like
Boiling Point: 208F, 98C
Melting Point: -132F, -91C
Vapor Pressure (mm Hg/68F): 40
Vapor Density (Air=1): 3.5

Specific Gravity: 0.68
Decomposition Temperature: UNKNOWN
Evaporation Rate And Ref: 2.8 (BUTYL ACETATE = 1)
Solubility In Water: NEGLIGIBLE;0.005%
Percent Volatiles By Volume: 100

Fire and Explosion Hazard Data

Flash Point: 25.0F, -3.9C
Flash Point Method: CC
Autoignition Temperature: 399F, 204C
Flammable Limits in Air % by volume: Lower Explosive Limit: 1.05, Upper Explosive Limit: 6.7
FLAMMABLE LIQUID AND VAPOR
Explosion: ABOVE FLASHPOINT, VAPOR-AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE. VAPORS CAN FLOW ALONG SURFACES TO DISTANT IGNITION SOURCE AND FLASH BACK. SENSITIVE TO STATIC DISCHARGE.

Fire 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 Procedures: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A

FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire Hazards: 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: Stable under ordinary conditions of use and storage. Heat will contribute to instability.
Conditions To Avoid: HIGH HEAT, SPARKS, OPEN FLAMES AND OTHER SOURCES OF IGNITION, AND INCOMPATIBLES.
Materials To Avoid: STRONG OXIDIZING AGENTS, ACIDS, LIQUID CHLORINE, RED PHOSPHOROUS.

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE, INCOMPLETELY BURNED CARBON PRODUCTS MAY FORM WHEN HEATED TO DECOMPOSITION.
Hazardous Polymerization: WILL NOT OCCURE

Health Hazard Data

WARNING! FLAMMABLE LIQUID AND VAPOR. HARMFUL, IF SWALLOWED. HARMFUL IF INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.

Route Of Entry - Inhalation: Inhalation of vapors irritates the respiratory tract. May produce light-headedness, dizziness, muscle uncoordination, loss of appetite and nausea. Higher concentrations can produce central nervous system depression, narcosis, and unconsciousness.

Route Of Entry - Skin: May cause light irritation, redness, pain.

Route Of Entry - Ingestion: May produce abdominal pain, nausea. Aspiration into lungs can produce severe lung damage and is a medical emergency. Other symptom expected to parallel inhalation.

Med Conditions Aggravated By Exposure: INDIVIDUALS WITH A HISTORY OF SKIN AND RESPIRATORY DISORDERS MAY BE AT INCREASED RISK FROM EXPOSURE.

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.

Emergency/First Aid Proc: EYES/SKIN: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEE DOCTOR.

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION.

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

Precautions for Safe Handling and Use

Steps If Material Released/Spill: REMOVE PERSONNEL. ELIMINATE IGNITION SOURCES. VENTILATE AREA. WEAR PROTECTIVE CLOTHING AND EQUIPMENT. ABSORB IN INERT MATERIAL AND PLACE IN APPROPRIATE DISPOSAL CONTAINER AND COVER. USE NON-SPARKLING TOOLS AND EQUIPMENT. DO NOT FLUSH TO SEWER.

Neutralizing Agent: NONE

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

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.

Control Measures

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL – 500ppm (TWA)
- ACGIH Threshold Value (TLV) – 500ppm (STEL)

Respiratory Protection: NIOSH/MSHA-APPROVED RESPIRATOR OR SCBA AS APPROPRIATE FOR EXPOSURE OF CONCERN.

Ventilation: MECHANICAL (GENERAL) VENTILATION OR LOCAL EXHAUST VENTILATION TO KEEP EXPOSURE LEVELS BELOW PEL. USE EXPLOSION-PROOF EQUIPMENT.

Skin Protection: WEAR IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING BOOTS, RUBBER GLOVES, LAB COAT, APRON OR COVERALLS, AS APPROPRIATE TO PREVENT SKIN CONTACT.

Eye Protection: USE CHEMICAL SAFETY GOGGLES AND/ OR FULL FACE SHIELD WHERE SPLASHING IS POSSIBLE..

Other Protective Equipment: MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA.

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

Transportation Data

DOT PSN Code: HAD	IATA UN ID Number: 1206
DOT Proper Shipping Name: HEPTANES	IATA Proper Shipping Name: HEPTANES
DOT Class: 3	IATA UN Class: 3
DOT ID Number: UN1206	IATA Label: FLAMMABLE LIQUID
DOT Pack Group: II	
DOT Label: FLAMMABLE LIQUID	AFI PSN Code: NDD
	AFI Prop. Shipping Name: HEPTANES
IMO PSN Code: HXF	AFI Class: 3
IMO Proper Shipping Name: HEPTANES	AFI ID Number: UN1206
IMO Regulations Page Number: 3235	AFI Pack Group: II
IMO UN Number: UN1206	AFI Label: FLAMMABLE LIQUID
IMO UN Class: 3.2	AFI Basic Pac Ref: 7-7
IMO Subsidiary Risk Label: -	MMAC Code: NR
IATA PSN Code: NDD	Additional Trans Data: NONE

Disposal Data

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. Refer to applicable regional, state and federal codes.

Label Data

Common Name: HEPTANE

Signal Word: WARNING!
Acute Health Hazard-Moderate: X
Contact Hazard-Slight: X
Fire Hazard-Moderate: X
Reactivity Hazard-None: X
Protect Eye: Y Protect Skin: Y

Regulatory Data

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: **NONE**

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.