



MATERIAL SAFETY DATA SHEETS

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

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Hexanes

This MSDS is valid for all grades of mixed isomers of Hexane with a Hexane concentration lower than 85%

Synonyms: Hexanes, Normal Hexane; Hexyl Hydride; n-Hexane; 3-Methyl Pentane

Formula: CH₃(CH₂)₄CH₃; note that this product is a mixture of n-hexane and other hexane isomers

Manufacturer: Pharmco Products Inc.
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Brookfield, Connecticut 06804, USA
Phone (203) 740-3471
Fax (203) 740-3481

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Shelbyville, KY 40065
Phone (502) 633-0650
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Emergency Contact:
CHEMTREC 1-800-424-9300

SECTION II

COMPOSITION / INFORMATION ON INGREDIENTS

%wt	Material	CAS	Exposure Limits
100%	Hexanes (n-Hexane)	110-54-3	50ppm OSHA/PEL; ACGIH/ TLV

SECTION III

HAZARDS IDENTIFICATION

Routes of Exposure:

Swallowing: This material can enter lungs during swallowing or vomiting and cause lung damage. May cause irritation of the digestive tract, nausea, nervous system depression and giddiness.

Skin Absorption: No harmful effects reported.

Inhalation: May cause irritation of the throat and nose.

Skin Contact: Prolonged or repeated contact may cause irritation and drying of the skin.

Eye Contact: May cause irritation including stinging, tearing, and redness.

Effects of Repeated Overexposure: Irritation of nose, throat or digestive system. Depression of nervous system.

Medical Conditions Aggravated by Overexposure:

Repeated exposure may aggravate skin disorders respiratory disorder, male reproductive disorders and peripheral nerve disorders Exposure to high concentrations may cause irregular heartbeats. Persons with pre-existing heart disorders may be more susceptible to this effect.

SECTION IV FIRST AID

Obtain medical attention for all cases of over-exposure.

Swallowing: Aspiration hazard - DO NOT induce vomiting. Obtain medical attention immediately.

Skin: Wash skin with soap and water for at least 15 minutes

Inhalation: Remove to fresh air; Give artificial respiration if not breathing; If breathing is difficult oxygen may be given by qualified personnel; Obtain medical assistance is discomfort persists.

Eye Contact: Flush eyes with water for at least 15 minutes. Obtain medical assistance.

SECTION V FIRE FIGHTING MEASURES

Fire/Explosive Properties

Flash Point: -22C Tag Closed Cup

Flammable Limits in Air: 1.0 - 8.0%

Flammability Classification: 3 (NFPA)

1993 Emergency Response Guidebook: Guide 27

1996 North American Emergency Response Guidebook: Guide 128

Extinguishing Media:

Small Fires: Use dry chemical, carbon dioxide, water spray or regular foam.

Large Fires: Water spray, fog or foam.

Special Fire Fighting Procedures: Use water spray to cool fire-exposed containers and structures; Use water spray to disperse vapors - re-ignition is possible; Use self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion Hazards:

- Vapors may travel to source of ignition and flash back.
- Vapors may settle in low or confined spaces.
- May produce a floating fire hazard.
- Static ignition hazard can result from handling and use.

SECTION VI

SPILL/ACCIDENTAL RELEASE MEASURES

All spills: Eliminate all ignition sources; ground all equipment; do not walk through spill; stop spill if possible; prevent entry into sewers, confined spaces, etc.; use a vapor suppressing foam to reduce vapors; absorb spill with non-combustible matter and transfer to containers; use non-sparking tools to collect absorbed material.

SECTION VII HANDLING AND STORAGE

- Flammable material - keep away from heat, sparks, and flame; sudden releases of hot organic vapors or mists from process equipment operating at elevated temperature may result in ignitions without the presence of obvious ignition sources.
- Avoid contact with eyes.
- Keep container closed.
- Use with adequate ventilation.
- Ground container when transferring product.
- Vapors may collect in containers; treat empty containers as hazardous.
- Wash thoroughly after handling
- Vapors may settle in low or confined areas

SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Special, local ventilation is needed where vapors escape to the workplace air

Respiratory Protection: Use self-contained breathing apparatus in high vapor concentration

Personal Protective Equipment: gloves, lab coat or uniform, safety glasses, eye wash, safety shower

SECTION IX

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear, colorless liquid

Odor: characteristic

Vapor pressure @ 20C: 140 mm Hg

Vapor density: 3.0 (air =1)

Boiling point @ 760mm Hg: Approximately 154F (68C)

Melting Point: -95C

Solubility in Water: Negligible

Specific Gravity : .675 @ 15.56C

Density @ 15.56C (60F) 5.62lbs/gal

Evaporation Rate: 8.1 (butyl acetate = 1)

Percent Volatiles: 100%

SECTION X

STABILITY/REACTIVITY INFORMATION

Stability: Stable

Conditions to avoid: Heat, flame, etc.

Incompatibility/Materials to avoid: strong oxidizing/reducing agents

Hazardous Combustion/Decomposition Products:

Carbon monoxide and/or carbon dioxide

Hazardous Polymerization: Will not occur

SECTION XI DISPOSAL CONSIDERATIONS

Vapors may collect in empty containers. Treat empty containers as hazardous.

Dispose of spill-clean up and other wastes in accordance with Federal, State, and local regulations.

SECTION XII TRANSPORTATION INFORMATION

Proper Shipping Name: Hexane

Hazard Class: 3

UN Number: 1208

Packing Group II

IMO Information: Hexanes

Label of Class: 3

Packing Group II

Low flashpoint group

SECTION XIII REGULATORY INFORMATION

Federal EPA

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
Hexane	110-54-3	5,000lb

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312). Components present in this product at a level which could require reporting under this statute are:

Hexane

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are:

Hexane (CAS 110-54-3) upper bound conc. 100%

Toxic Substances Control Act (TSCA) Status:

The ingredients of this product are on the TSCA inventory.

State Right to Know

California Proposition 65: This product may contain trace levels of benzene known to the State of California to cause cancer. This product may contain trace levels of toluene known to the State of California to be a developmental toxicant.

This product contains hexane which may be identified as a hazardous substance by individual States.

California SCAQMD Rule 443.1 (VOC's)

A Volatile Organic Compound (VOC) is any volatile compound of carbon excluding methane, carbon monoxide, carbonic acid, metallic carbides, or carbonates, ammonium carbonate, 1,1,1 tri-chloroethane, methylene chloride, (FC-23), (CFC-113), (CFC-12), (CFC-11), (CFC-22), (CFC-114) and (CFC-115).

674 g/l

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.