

MATERIAL SAFETY DATA SHEET

~~UNSEAL~~ PRODUCT IS NOW
CALLED "UNSTICK"

Date Prepared: 01/30/96

Date Printed: 06/15/96

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I. PRODUCT IDENTIFICATION

Product Name: HEPTANE
 Chemical Name: Not Applicable
 Chemical Family: Aliphatic Hydrocarbon
 Product Description: Clear colorless liquid
 Emergency Phone Number: CHEMTREC 800-424-9300
 CHEMTREC INTERNATIONAL 202-483-7616
 Regulatory Information Number: 800-325-3751

II. COMPOSITION / INFORMATION ON INGREDIENTS

This product is hazardous as defined in 29 CFR1910.1200.

<u>Ingredient (s)</u>	<u>CAS Number</u>	<u>% by Weight</u>
Heptane	142-82-5	100%

OSHA HAZARD	Flammable	Hazard Class 3
OSHA PEL	ACGIH TLV	

III. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Exposure may cause mild eye irritation. Symptoms may include stinging, tearing, and redness.

Skin

Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking, and skin burns. Skin absorption is unlikely.

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III. HAZARDS IDENTIFICATION (Continued)

Swallowing

Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and /or damage.

Inhalation

Exposure to vapor or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits.

Symptoms of Exposure

Gastrointestinal irritation (nausea, vomiting, diarrhea), irritation (nose, throat, respiratory tract), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), death.

Target Organ Effects

No data.

Developmental Information

There are no data available for assessing risk to the fetus from maternal exposure to this material.

Cancer Information

No Data

Other Health Effects

No Data

Primary Route (s)

Inhalation, skin contact, eye contact

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IV. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Do not induce vomiting. This material is an aspiration hazard. If individual is drowsy or unconscious. Place on left side with head down. Seek medical attention. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek medical attention.

Note to Physician

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Lung (for example, asthma-like conditions).

V. FIRE FIGHTING MEASURES

Flash Point

< 20.0 F (-5.6 C) TCC

Explosive Limit

(for component) Lower 1.1%

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

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V. FIRE FIGHTING MEASURES (Continued)

Fire and Explosion Hazards

Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can *ignite* explosively.

Extinguishing Media

Regular foam, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full face piece operated in a positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protection section of this MSDS.

NFPA Rating

Health - 1, Flammability - 3 Reactivity - 0

VI. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

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VII. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. **WARNING...** Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperatures values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

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VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

Respiratory Protection

If workplace exposure limit (s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulation also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV (s).

Exposure Guidelines Component

HEPTANE (142-82-5)

OSHA VPEL 400.000 ppm - TWA

OSHA VPEL 500.000 ppm - STEL

ACGIH TLV 400,000 ppm - TWA

ACGIH TL 500.000 ppm - STEL

IX. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (for component) 200.0 F (93.3 C) @760 mmHg

Vapor Pressure (for component) 40.000 mmHg @ 68.0 F

Specific Vapor Density 3.500 @ AIR =1

Specific Gravity .696 @ 60.0 F

Liquid Density 5.800 lbs./gal. @ 60.0 F
.696 kg/l @ 15.60 C

Percent Volatile 100.0 %

Evaporation Rate 2.80 (Butyl Acetate)

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IX. PHYSICAL AND CHEMICAL PROPERTIES (Continued)

Appearance	No Data
State	Liquid
Physical Form	Neat
Color	Clear, Colorless
Odor	No Data
pH	Not Applicable

X. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Chemical Stability

Stable

Incompatibility

Avoid contact with: strong oxidizing agents.

XI. TOXICOLOGICAL INFORMATION

No Data

XII. ECOLOGICAL INFORMATION

No Data

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XIII. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations.

XIV. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description: Heptanes, 3 (flammable Liquid) UN1206, II
Container/Mode 55 Gallon Drum/Truck Package
NOS Component Heptane
RQ (Reportable Quantity) Not applicable
(49 CFR 172.101)

XV. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substance Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4

None

SARA 302 Components - 40 CFR 355 Appendix A

None

SARA 311/313 Hazard Class - 40 CFR 370.2

Immediate () Delayed () Fire (X) Reactive ()
Sudden Release of Pressure ()

SARA 313 Components - 40 CFR 372.65

None

International Regulations

Inventory Status

DSL (CANADA) The intentional ingredients of this product are listed.

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XV. REGULATORY INFORMATION

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance (s) know to the state of California to cause cancer.

BENZENE

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance (s) know to the state of California to cause cancer.

TOLUENE

New Jersey RTK Label Information

N-HEPTANE

142-82-5

Pennsylvania RTK Label Information

HEPTANE (N-)

142-82-5

XVI. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.