ATTN: SAFETY DIRECTOR
MARY ONSRUD
UNIVERSITY OF WISCONSIN WHITewater
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WHITewater WI
53190

EMERGENCY PHONE 1-414-273-3850
DATE 09/24/99
CUST#: 523216
PO#: CC/ONSURD/92399

MATERIAL SAFETY DATA SHEET PAGE 1

SECTION 1. -- -- -- -- -- -- CHEMICAL IDENTIFICATION -- -- -- -- -- --

CATALOG #: 27051-2
NAME: HEPTANE, 99+%, HPLC GRADE

SECTION 2. -- -- -- -- COMPOSITION/INFORMATION ON INGREDIENTS -- -- --

CAS #: 142-82-5
MP: C7H16
EC NO: 205-563-8

SYNONYMS
DIPROPYL METHANE * EPTANI (ITALIAN) * GETTYSOLVE-C * HEPTAN (POLISH) *
N-HEPTANE * HEPTANE (ACGIH:OSHA) * HEPTANEN (DUTCH) * N-HEPTANE *
(OSHA) * HEPTYL HYDRIDE *

SECTION 3. -- -- -- -- -- -- HAZARDS IDENTIFICATION -- -- -- -- -- --

LABEL PRECAUTIONARY STATEMENTS
FLAMMABLE (USA)
HIGHLY FLAMMABLE (EU)
HARMFUL
HARMFUL BY INHALATION AND IF SWALLOWED.
IRRITATING TO EYES AND RESPIRATORY SYSTEM.
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING.
KEEP CONTAINER TIGHTLY CLOSED IN A COOL WELL-VENTILATED PLACE.

SECTION 4. -- -- -- -- -- -- FIRST-AID MEASURES -- -- -- -- -- --

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

SECTION 5. -- -- -- -- -- -- FIRE FIGHTING MEASURES -- -- -- -- -- --

EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.
USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

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CATALOG #: 27051-2
NAME: HEPTANE, 99%, HPLC GRADE

FLAMMABLE LIQUID. VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK. CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS. FORMS EXPLOSIVE MIXTURES IN AIR.

SECTION 6. ACCIDENTAL RELEASE MEASURES

EVACUATE AREA. SHUT OFF ALL SOURCES OF IGNITION. WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

SECTION 7. HANDLING AND STORAGE

REFER TO SECTION 8.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RUBBER GLOVES. CHEMICAL SAFETY GOGGLES. USE NONSPARKING TOOLS. DO NOT BREATHE VAPOR. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. STORE IN A COOL DRY PLACE. WASH THOROUGHLY AFTER HANDLING. REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY. HARMFUL LIQUID. IRRITANT.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES
BOILING POINT: 98 °C
MELTING POINT: -91 °C
FLASHPOINT: 30 °F
EXPLOSION LIMITS IN AIR:
   UPPER 7.3%
   LOWER 1.1%
VAPOR PRESSURE: 83 MMHG
SPECIFIC GRAVITY: 0.684
VAPOR DENSITY: 3.5 G/L

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES
OXIDIZING AGENTS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CONTINUED ON NEXT PAGE
CATALOG #: 27051-2
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CARBON MONOXIDE, CARBON DIOXIDE

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS
MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
HARMFUL IF INHALED OR SWALLOWED.
VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
PROLONGED OR REPEATED EXPOSURE TO SKIN CAUSES DEFATTING AND DERMATITIS.
EXPOSURE TO LARGE AMOUNTS CAN CAUSE:
NARCOTIC EFFECT

RTECS #: MI7700000 HEPTANE

TOXICITY DATA
IHL-RAT LC50: 103 GM/M3/4H
IVN-MUS LD50: 222 MG/KG

TARGET ORGAN DATA
BEHAVIORAL (HALUCINATIONS, DISTORTED PERCEPTIONS)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

SECTION 12. ECOLOGICAL INFORMATION

DATA NOT YET AVAILABLE.

SECTION 13. DISPOSAL CONSIDERATIONS

BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE.
OBSEVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. TRANSPORT INFORMATION

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. REGULATORY INFORMATION

EUROPEAN INFORMATION
EC INDEX NO: 601-008-00-2
HIGHLY FLAMMABLE
HARMFUL
R 11
HIGHLY FLAMMABLE.
S 9
KEEP CONTAINER IN A WELL-VENTILATED PLACE.

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CATALOG #: 27051-2
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S 16 KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
S 29 DO NOT BREATHE VAPOR.
S 33 DO NOT EMPTY INTO DRAINS.
S 33 TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK
ACGIH TLV-STEEL 2050 MG/M3 (500 PPM) DTLVS* TLV/BEI, 1997
ACGIH TLV-TWA 1640 MG/M3 (400 PPM) DTLVS* TLV/BEI, 1997
OSHA STANDARD-AIR: TWA 500 PPM (2000 MG/M3) DTLVS* 3.124, 1971
OSHA PEL (GEN INDU): 8H TWA 500 PPM (2000 MG/M3)
C F R G BR 29, 1910.1000, 1994
OSHA PEL (CONSTRUC): 8H TWA 500 PPM (2000 MG/M3)
C F R G BR 29, 1926.55, 1994
OSHA PEL (SHIPTARD): 8H TWA 500 PPM (2000 MG/M3)
C F R G BR 29, 1915.1000, 1993
OSHA PEL (PRED CONT): 8H TWA 500 PPM (2000 MG/M3)
C F R G BR 41.50-204.50, 1994
OEL-AUSTRALIA: TWA 400 PPM (1600 MG/M3); STEL 500 PPM (2000 MG/M3) JAN 1993
OEL-CZECHIA: MAK 500 PPM (2000 MG/M3) JAN 1999
OEL-BELGIUM: TWA 400 PPM (1640 MG/M3); STEL 500 PPM (2050 MG/M3) JAN 1993
OEL-DENMARK: TWA 200 PPM (820 MG/M3) JAN 1999
OEL-FINLAND: TWA 300 PPM (1200 MG/M3); STEL 500 PPM (2000 MG/M3) JAN 1993
OEL-NORWAY: TWA 500 PPM (2000 MG/M3) JAN 1993
OEL-JAPAN: MAK 500 PPM (2000 MG/M3) JAN 1993
OEL-JAPAN: TWA 200 PPM (820 MG/M3) JAN 1993
OEL-THE NETHERLANDS: TWA 400 PPM (1600 MG/M3) JAN 1993
OEL-THE PHILIPPINES: TWA 500 PPM (2000 MG/M3) JAN 1993
OEL-POLAND: MAC(TWA) 1200 MG/M3, MAC(STEL) 2000 MG/M3, JAN 1999
OEL-RUSSIA: TWA 200 PPM JAN 1993
OEL-SWEDEN: TWA 200 PPM (800 MG/M3); STEL 300 PPM (1250 MG/M3) JAN 1993
OEL-SWITZERLAND: TWA 400 PPM (1600 MG/M3); STEL 800 PPM JAN 1993
OEL-TURKEY: TWA 500 PPM (2000 MG/M3) JAN 1993
OEL-UNITED KINGDOM: TWA 400 PPM (1600 MG/M3); STEL 500 PPM JAN 1993
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV
NIOSH REL TO HEPTANE-AIR: 10H TWA 85 PPM; CL 440 PPM; 15M
NIOSH* DHHS #92-100, 1992
NOHS 1974: H2D 36060; NIS 153; TNF 20154; NOS 110; TNE 221101
NOES 1983: H2D 36060; NIS 191; TNF 37852; NOS 134; TNE 449487; TFE 448550

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES
ON EPA IRIS DATABASE
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JUNE 1999

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NIOSH ANALYTICAL METHOD, 1994: HYDROCARBONS, BP 36-126 DEGREE C, 1500
NIOSH ANALYTICAL METHOD, 1996: VOLATILE ORGANIC COMPOUND, 2549

SECTION 16. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ALDRICH SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

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