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M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -  
CATALOG #: 405043  
NAME: HEPTANE, 95%

SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -  
CAS #: 142-82-5  
MF: 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- - - - -  
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.  
CALL A PHYSICIAN.  
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.  
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS  
AMOUNTS OF WATER.  
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF  
WATER FOR AT LEAST 15 MINUTES.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -  
EXTINGUISHING MEDIA  
WATER SPRAY.  
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.  
UNUSUAL FIRE AND EXPLOSIONS HAZARDS  
VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND  
FLASH BACK.  
CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS.  
FLAMMABLE LIQUID.  
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -  
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY  
RUBBER GLOVES.  
COVER WITH DRY-LIME, SAND, OR SODA ASH. PLACE IN COVERED CONTAINERS  
USING NON-SPARKING TOOLS AND TRANSPORT OUTDOORS.  
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.  
EVACUATE AREA.  
SHUT OFF ALL SOURCES OF IGNITION.  
USE NONSPARKING TOOLS.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -

REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -

SAFETY SHOWER AND EYE BATH.  
USE NONSPARKING TOOLS.  
MECHANICAL EXHAUST REQUIRED.  
REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.  
WASH THOROUGHLY AFTER HANDLING.  
DO NOT BREATHE VAPOR.  
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.  
AVOID PROLONGED OR REPEATED EXPOSURE.  
NIOSH/MSHA-APPROVED RESPIRATOR.  
COMPATIBLE CHEMICAL-RESISTANT GLOVES.  
CHEMICAL SAFETY GOGGLES.  
KEEP TIGHTLY CLOSED.  
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.  
STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR  
LIQUID.

PHYSICAL PROPERTIES

BOILING POINT: 98 C  
MELTING POINT: -91 C  
FLASHPOINT 30 F  
-1 C

EXPLOSION LIMITS IN AIR:

UPPER 7 %  
LOWER 1.1 %

VAPOR PRESSURE: 83 MMHG  
SPECIFIC GRAVITY: 0.684  
VAPOR DENSITY: 3.5 G/L

SECTION 10. - - - - - -STABILITY AND REACTIVITY - - - - -

STABILITY

STABLE.

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS  
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
CARBON MONOXIDE, CARBON DIOXIDE  
HAZARDOUS POLYMERIZATION  
WILL NOT OCCUR.

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -

ACUTE EFFECTS

MAY CAUSE SKIN IRRITATION.  
MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.  
CAUSES EYE IRRITATION.  
HARMFUL IF INHALED.  
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER  
RESPIRATORY TRACT.  
HARMFUL IF SWALLOWED.  
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 GTPZAB 32(10),23,1988  
IVN-MUS LD50:222 MG/KG JPMSAE 67,566,1978

TARGET ORGAN DATA

BEHAVIORAL (HALLUCINATIONS, 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 - - - - -

CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF  
THIS MATERIAL.  
BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND  
SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY

FLAMMABLE.

OBSERVE 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.

R 38

IRRITATING TO SKIN.

R 50/53

VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

R 65

HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

R 67

VAPORS MAY CAUSE DROWSINESS AND DIZZINESS.

S 9

KEEP CONTAINER IN A WELL-VENTILATED PLACE.

S 16

KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.

S 23

DO NOT BREATHE VAPOR.

S 29

DO NOT EMPTY INTO DRAINS.

S 33

TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

ACGIH TLV-STEL 500 PPM DTLVS\* TLV/BEI,1999

ACGIH TLV-TWA 400 PPM DTLVS\* TLV/BEI,1999

MSHA STANDARD-AIR:TWA 500 PPM (2000 MG/M3)

DTLVS\* 3,124,1971

OSHA PEL (GEN INDU):8H TWA 500 PPM (2000 MG/M3)

CFRGBR 29,1910.1000,1994

OSHA PEL (CONSTRUC):8H TWA 500 PPM (2000 MG/M3)

CFRGBR 29,1926.55,1994

OSHA PEL (SHIPYARD):8H TWA 500 PPM (2000 MG/M3)

CFRGBR 29,1915.1000,1993

OSHA PEL (FED CONT):8H TWA 500 PPM (2000 MG/M3)

CFRGBR 41,50-204.50,1994

OEL-AUSTRALIA: TWA 400 PPM (1600 MG/M3), STEL 500 PPM, JAN1993

OEL-AUSTRIA: MAK 500 PPM (2000 MG/M3), JAN1999

OEL-BELGIUM: TWA 400 PPM (1640 MG/M3), STEL 500 PPM, JAN1993

OEL-DENMARK: TWA 200 PPM (820 MG/M3), JAN1999

OEL-FINLAND: TWA 300 PPM (1200 MG/M3), STEL 500 PPM (2000 MG/M3), JAN1999

OEL-FRANCE: VME 400 PPM (1600 MG/M3), JAN1999

OEL-GERMANY: MAK 500 PPM (2000 MG/M3), JAN1999

OEL-JAPAN: OEL 200 PPM (820 MG/M3), JAN1999

OEL-THE NETHERLANDS: MAC-TGG 400 PPM (1600 MG/M3), JAN1999

OEL-NORWAY: TWA 200 PPM (800 MG/M3), JAN1999

OEL-THE PHILIPPINES: TWA 500 PPM (2000 MG/M3), JAN1993

OEL-POLAND: MAC(TWA) 1200 MG/M3, MAC(STEL) 2000 MG/M3, JAN1999

OEL-RUSSIA: TWA 200 PPM, JAN1993

OEL-SWEDEN: NGV 200 PPM (800 MG/M3), KTV 300 PPM (1200 MG/M3), JAN1999

OEL-SWITZERLAND: MAK-W 400 PPM (1600 MG/M3), KZG-W 800 PPM (3200 MG/M3), JAN1999

OEL-TURKEY: TWA 500 PPM (2000 MG/M3), JAN1993

OEL-UNITED KINGDOM: LTEL 400 PPM (1600 MG/M3), STEL 500 PPM, JAN1993

OEL IN ARGENTINA, 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: HZD 36060; NIS 153; TNF 20154; NOS 110; TNE 221101

NOES 1983: HZD 36060; NIS 191; TNF 37852; NOS 134; TNE 449487; TFE

44550

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, OCTOBER 2000  
NIOSH ANALYTICAL METHOD, 1994: HYDROCARBONS, BP 36-126 DEGREE C, 1500  
NIOSH ANALYTICAL METHOD, 1996: VOLATILE ORGANIC COMPOUND, 2549

SECTION 16. - - - - - OTHER INFORMATION- - - - -

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