MATERIAL SAFETY DATA SHEET

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)
HARMFUL
HARMFUL BY INHALATION AND IF SWALLOWED.
IRRITATING TO EYES AND RESPIRATORY SYSTEM.
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
TAKK 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

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

RTVECS #: 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-STE L 500 PPM
ACGIH TLV-TWA 400 PPM
MSHA STANDARD-AIR: TWA 500 PPM (2000 MG/M3)
OSHA PEL (GEN INDU): 8H TWA 500 PPM (2000 MG/M3)
OSHA PEL (CONSTRUCT): 8H TWA 500 PPM (2000 MG/M3)
OSHA PEL (SHIPYARD): 8H TWA 500 PPM (2000 MG/M3)
OSHA PEL (FED CONT): 8H TWA 500 PPM (2000 MG/M3)
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-CHINA: 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-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
NOMS 1974: HZD 36060, NIS 153; TNF 20154; NOS 110; TNE 221101
NOES 1983: HZD 36060, NIS 151; TNF 37852; NOS 134; TNE 449487; TFE
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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