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BIOCHEMICALS AND DIAGNOSTIC REAGENTS

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DATE: 08/29/95
CUST#: 2-043-15940
PO#: 80407

MATERIAL SAFETY DATA SHEET

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

PRODUCT #: H6511 NAME: 3-HEPTANONE

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

CAS #:106-35-4
MF: C7H14O1
SYNONYMS
AETHYLBUTYLKETON (GERMAN) * BUTYL ETHYL KETONE * N-BUTYL ETHYL KETONE * EPTAN-3-ONE (ITALIAN) * ETHYLBUTYLCETONE (FRENCH) * ETHYLBUTYLKETON (DUTCH) * ETHYL BUTYL KETONE (ACGIH,OSHA) * ETILBUTILCHETONE (ITALIAN) * HEPTAN-3-ON (DUTCH, GERMAN) * HEPTAN-3-ONE * 3-HEPTANONE (OSHA) *

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

LABEL PRECAUTIONARY STATEMENTS
COMBUSTIBLE (USA DEFINITION)
FLAMMABLE (EUROPEAN DEFINITION)
IRRITANT
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
MAY FORM EXPLOSIVE PEROXIDES.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING.

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

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE REUSE.

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

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

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PRODUCT #: H6511 NAME: 3-HEPTANONE
MF: C7H1401

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.
COMBUSTIBLE.
UNUSUAL FIRE AND EXPLOSIONS HAZARDS
VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK.

SECTION 6. - - - - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - - - - -

EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - - - - - - HANDLING AND STORAGE- - - - - - - - - - -
REFER TO SECTION 8.

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

CHEMICAL SAFETY GOGGLES.
RUBBER GLOVES.
NIOSH/MSHA-APPROVED RESPIRATOR.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
DO NOT BREATHE VAPOR.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
IRRITANT.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT AND OPEN FLAME.
STORE IN A COOL DRY PLACE.
FORMS EXPLOSIVE PEROXIDES ON PROLONGED STORAGE.

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

APPEARANCE AND ODOR

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PRODUCT #: H6511 NAME: 3-HEPTANONE
MF: C7H14O1

COLORLESS LIQUID
BOILING POINT: 146 C TO 149 C
MELTING POINT: -39 C
FLASHPOINT 106 F
41C
SPECIFIC GRAVITY: 0.818

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

INCOMPATIBILITIES
STRONG OXIDIZING AGENTS
STRONG REDUCING AGENTS
STRONG BASES
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE

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

ACUTE EFFECTS
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
CAUSES SKIN IRRITATION.
EXPOSURE CAN CAUSE:
NAUSEA, DIZZINESS AND HEADACHE
RTECS NO: MJ5250000
3-HEPTANONE
IRRITATION DATA

SKN-RBT 500 MG OPEN MLD	UCDS** 3/12/69
SKN-RBT 500 MG/24H MOD	FCTXAV 16,731,78
EYE-RBT 100 MG MLD	FCTXAV 16,731,78
EYE-RBT 500 MG/24H MLD	85JCAE -,286,86

TOXICITY DATA

ORL-RAT LD50:2760 MG/KG	JIHTAB 31,60,49
SKN-RBT LD50:>20 ML/KG	UCDS** 3/12/69

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 - - - - - - - - - -

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MF: C7H1401

DATA NOT YET AVAILABLE.

SECTION 13. - - - - - - - - - - DISPOSAL CONSIDERATIONS - - - - - - - - - -

THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - - - - - - TRANSPORT INFORMATION - - - - - - - - - -

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - - - - - - REGULATORY INFORMATION - - - - - - - - - -

REVIEWS, STANDARDS, AND REGULATIONS
ACGIH TLV-TWA 50 PPM 85INA8 6,592,91
MSHA STANDARD-AIR:TWA 50 PPM (230 MG/M3)
DTLVS* 3,105,71
OSHA PEL (GEN INDU):8H TWA 50 PPM (230 MG/M3)
CFRGBR 29,1910.1000,94
OSHA PEL (CONSTRUC):8H TWA 50 PPM (230 MG/M3)
CFRGBR 29,1926.55,94
OSHA PEL (SHIPYARD):8H TWA 50 PPM (230 MG/M3)
CFRGBR 29,1915.1000,93
OSHA PEL (FED CONT):8H TWA 50 PPM (230 MG/M3)
CFRGBR 41,50-204.50,94
OEL-AUSTRALIA:TWA 50 PPM (230 MG/M3) JAN93
OEL-BELGIUM:TWA 50 PPM (234 MG/M3) JAN93
OEL-DENMARK:TWA 50 PPM (230 MG/M3) JAN93
OEL-FINLAND:TWA 50 PPM (230 MG/M3);STEL 75 PPM (345 MG/M3) JAN93
OEL-FRANCE:TWA 50 PPM (230 MG/M3) JAN93
OEL-THE NETHERLANDS:TWA 50 PPM (230 MG/M3) JAN93
OEL-THE PHILIPPINES:TWA 50 PPM (230 MG/M3) JAN93
OEL-SWITZERLAND:TWA 50 PPM (230 MG/M3) JAN93
OEL-UNITED KINGDOM:TWA 50 PPM (230 MG/M3);STEL 75 PPM JAN93
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV
NIOSH REL TO ETHYL BUTYL KETONE-AIR:10H TWA 50 PPM
NIOSH* DHHS #92-100,92
NOHS 1974: HZD 36330; NIS 8; TNF 320; NOS 14; TNE 1923

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MF: C7H14O1

NOES 1983: HZD 36330; NIS 20; TNF 2103; NOS 9; TNE 11318; TFE 1164
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, APRIL 1995
NIOSH ANALYTICAL METHOD, 1994: KETONES II, 1301

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

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