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# SAFETY DATA SHEET

#### SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 34632

NAME: 6-Methyl-5-hepten-2-one

SYNONYMS: 2-Methyl-2-hepten-6-one

24 HOUR EMERGENCY

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352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

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#### SECTION 2. HAZARDS IDENTIFICATION

# CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS) FLAMMABLE LIQUIDS (CATEGORY 3), H226  $\,$ 

SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 3), H402 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 3), H412 FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

#### GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD WARNING

HAZARD STATEMENT(S)

H226 FLAMMABLE LIQUID AND VAPOUR.

H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

PRECAUTIONARY STATEMENT(S)

P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT

SURFACES. NO SMOKING.

P233 KEEP CONTAINER TIGHTLY CLOSED.

P240 GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.

USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ P241

LIGHTING EQUIPMENT.

P242 USE ONLY NON-SPARKING TOOLS.

P243 TAKE PRECAUTIONARY MEASURES AGAINST STATIC

DISCHARGE.

P273 AVOID RELEASE TO THE ENVIRONMENT.

P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE

PROTECTION/ FACE PROTECTION.

P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY

ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/

SHOWER.

**NONE** 

P370 + P378IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR

ALCOHOL-RESISTANT FOAM FOR EXTINCTION.

P403 + P235STORE IN A WELL-VENTILATED PLACE. KEEP COOL. P501

DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED

WASTE DISPOSAL PLANT.

HAZARDS NOT

**OTHERWISE** 

CLASSIFIED (HNOC)

OR NOT COVERED

BY GHS

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:  $C_8H_{14}O$ 

MW: 126.20

CAS-NO. 110-93-0 PURITY: 96 - 100% (GC)

#### **HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION
6-Methyl-5-hepten-2-one		
	FLAM. LIQ. 3; AQUATIC	<= 100 %
	ACUTE 3; AQUATIC CHRONIC	
	3; H226, H402, H412	

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

#### **SECTION 4. FIRST-AID MEASURES**

#### **DESCRIPTION OF FIRST AID MEASURES**

**GENERAL ADVICE** CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA

SHEET TO THE DOCTOR IN ATTENDANCE. MOVE OUT

OF DANGEROUS AREA.

**IF INHALED** IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF

NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

CONSULT A PHYSICIAN.

IN CASE OF SKIN WASH OFF WITH SOAP AND PLENTY OF WATER.

**CONTACT** CONSULT A PHYSICIAN.

**IN CASE OF EYE** FLUSH EYES WITH WATER AS A PRECAUTION.

CONTACT

**IF SWALLOWED** DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING

BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE

MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT SYMPTOMS AND

EFFECTS, BOTH ACUTE

AND DELAYED

THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE

SECTION 2.2) AND/OR IN SECTION 11.

INDICATION OF ANY IMMEDIATE MEDICAL

ATTENTION AND SPECIAL TREATMENT

NEEDED

NO DATA AVAILABLE

# SECTION 5. FIRE AND EXPLOSION DATA

#### **EXTINGUISHING MEDIA**

SUITABLE

SMALL (INCIPIENT) FIRES MUST BE EXTINGUISHED EXTINGUISHING MEDIA WITH ALCOHOL RESISTANT FOAM, DRY CHEMICAL

POWDER OR CARBON DIOXIDE. LARGE AMOUNTS OF WATER ARE INEFFECTIVE. COOL CONTAINERS WITH

LARGE AMOUNTS OF WATER.

SPECIAL HAZARDS ARISING FROM THE

**CARBON OXIDES** 

SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF CONTAINED BREATHING APPARATUS FOR

**FIREFIGHTERS** FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL USE PERSONAL PROTECTIVE EQUIPMENT. AVOID PRECAUTIONS, BREATHING VAPOURS, MIST OR GAS. ENSURE **PROTECTIVE** ADEQUATE VENTILATION. REMOVE ALL SOURCES OF

**EQUIPMENT AND** IGNITION. BEWARE OF VAPOURS ACCUMULATING TO **EMERGENCY** FORM EXPLOSIVE CONCENTRATIONS, VAPOURS CAN

**PROCEDURES** ACCUMULATE IN LOW AREAS.

FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL** PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE **PRECAUTIONS** TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

DISCHARGE INTO THE ENVIRONMENT MUST BE

AVOIDED.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP** 

CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WETBRUSHING AND PLACE IN CONTAINER FOR

DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE

SECTION 13).

REFERENCE TO OTHER **SECTIONS** 

FOR DISPOSAL SEE SECTION 13.

#### SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

AVOID INHALATION OF VAPOUR OR MIST. KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. TAKE MEASURES TO PREVENT THE BUILD

UP OF ELECTROSTATIC CHARGE.

#### FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES STORE IN COOL PLACE. KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO

PREVENT LEAKAGE.

Store at RT

SPECIFIC END USE(S)

APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **CONTROL PARAMETERS**

#### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

# **EXPOSURE CONTROLS**

APPROPRIATEHANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENEENGINEERINGAND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND

**CONTROLS** AT THE END OF WORKDAY.

# PERSONAL PROTECTIVE EQUIPMENT

**EYE/FACE** FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR

**PROTECTION** EYE PROTECTION TESTED AND APPROVED UNDER

APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH

(US) OR EN 166(EU).

# SKIN PROTECTION

HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.

SPLASH CONTACT

MATERIAL: BUTYL-RUBBER

MINIMUM LAYER THICKNESS: 0.3 MM

BREAK THROUGH TIME: 60 MIN

MATERIAL TESTED:BUTOJECT (KCL 897, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.

# BODY PROTECTION

IMPERVIOUS CLOTHING, FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING. THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

# RESPIRATORY PROTECTION

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

# CONTROL OF ENVIRONMENTAL EXPOSURE

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.
DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

# INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Slightly yellow liquid
ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE

**MELTING** 

POINT/FREEZING POINT

INITIAL BOILING POINT 173 - 174 °C

AND BOILING RANGE

FLASH POINT 57 °C

EVAPORATION RATE NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER UPPER EXPLOSION LIMIT: 7.3 %(V) FLAMMABILITY OR LOWER EXPLOSION LIMIT: 1.1 %(V)

EXPLOSIVE LIMITS

VAPOUR PRESSURE 8 HPA AT 50 C

1 HPA AT 20 C

1,120 HPA AT 170 C

VAPOUR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY 0.85

WATER SOLUBILITY NO DATA AVAILABLE PARTITION COEFFICIENT: LOG POW: 2.4 AT 25 C

N- OCTANOL/WATER

AUTO-IGNITION NO DATA AVAILABLE

TEMPERATURE

DECOMPOSITION > 170 C

TEMPERATURE

VISCOSITY NO DATA AVAILABLE EXPLOSIVE PROPERTIES NO DATA AVAILABLE OXIDIZING PROPERTIES NO DATA AVAILABLE

#### OTHER SAFETY INFORMATION

NO DATA AVAILABLE

#### SECTION 10. STABILITY AND REACTIVITY

**REACTIVITY** NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE

CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS NO DATA AVAILABLE

**CONDITIONS TO AVOID** HEAT, FLAMES AND SPARKS.

INCOMPATIBLE STRONG OXIDIZING AGENTS, STRONG REDUCING

MATERIALS AGENTS, STRONG BASES

HAZARDOUS HAZARDOUS DECOMPOSITION PRODUCTS FORMED

**DECOMPOSITION**UNDER FIRE CONDITIONS. - CARBON OXIDES**PRODUCTS**OTHER DECOMPOSITION PRODUCTS - NO DATA

AVAILABLE

IN THE EVENT OF FIRE: SEE SECTION 5

#### **SECTION 11.** TOXICOLOGICAL INFORMATION

#### INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY LD50 ORAL - RAT - 3,500 MG/KG

INHALATION: NO DATA AVAILABLE

LD50 DERMAL - RABBIT - > 5,000 MG/KG

NO DATA AVAILABLE

**SKIN** SKIN - RABBIT

CORROSION/IRRITATION RESULT: NO SKIN IRRITATION

**SERIOUS EYE** EYES - RABBIT

DAMAGE/EYE IRRITATION **RESULT: NO EYE IRRITATION** 

RESPIRATORY OR SKIN

**SENSITISATION** 

NO DATA AVAILABLE

**GERM CELL** S. TYPHIMURIUM MUTAGENICITY **RESULT: NEGATIVE** 

HISTIDINE REVERSION (AMES)

**CARCINOGENICITY** 

IARC: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS

IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED

HUMAN CARCINOGEN BY IARC.

NO COMPONENT OF THIS PRODUCT PRESENT AT ACGIH:

> LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL

CARCINOGEN BY ACGIH.

NTP: NO COMPONENT OF THIS PRODUCT PRESENT AT

> LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED

CARCINOGEN BY NTP.

OSHA: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON

OSHA S LIST OF REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN** 

**TOXICITY - SINGLE** 

**EXPOSURE** 

NO DATA AVAILABLE

SPECIFIC TARGET ORGAN

**TOXICITY - REPEATED** 

**EXPOSURE** 

NO DATA AVAILABLE

**ASPIRATION HAZARD** NO DATA AVAILABLE

ADDITIONAL INFORMATION

RTECS: MJ9700000

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE

NOT BEEN THOROUGHLY INVESTIGATED.

# **SECTION 12. ECOLOGICAL INFORMATION**

**TOXICITY** 

TOXICITY TO FISH LC50 - PIMEPHALES PROMELAS (FATHEAD MINNOW)

- 85.7 MG/L - 96 H

TOXICITY TO DAPHNIA AND

EC50 - DAPHNIA MAGNA (WATER FLEA) - 129 MG/L - 48 H

OTHER AQUATIC

**INVERTEBRATES** 

TOXICITY TO ALGAE IC50 - DESMODESMUS SUBSPICATUS (GREEN ALGAE)

- 191 MG/L - 72 H

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY BIOTIC/AEROBIC

**BIOACCUMULATIVE** 

**POTENTIAL** 

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND

PBT/VPVB ASSESSMENT NOT AVAILABLE AS

VPVB ASSESSMENT CHEMICAL SAFETY ASSESSMENT NOT

REQUIRED/NOT CONDUCTED.

OTHER ADVERSE EFFECTS AN ENVIRONMENTAL HAZARD CANNOT BE

EXCLUDED IN THE EVENT OF UNPROFESSIONAL

HANDLING OR DISPOSAL. HARMFUL TO AQUATIC LIFE.

#### SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

**PRODUCT** BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH

> AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY

> FLAMMABLE. OFFER SURPLUS AND NON-RECYCLABLE

SOLUTIONS TO A LICENSED DISPOSAL COMPANY.

**CONTAMINATED PACKAGING** 

DISPOSE OF AS UNUSED PRODUCT.

#### **SECTION 14.** TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: KETONES, LIQUID, N.O.S. (6-Methyl-5-hepten-2-one)

UN NUMBER: 1224 CLASS: 3 PACKING GROUP: Ш NO POISON INHALATION

HAZARD:

**IMDG** 

PROPER SHIPPING NAME: KETONES, LIQUID, N.O.S. (6-Methyl-5-hepten-2-one)

UN NUMBER: 1224 CLASS: 3 PACKING GROUP: Ш EMS-NO: F-E, S-D

**IATA** 

PROPER SHIPPING NAME: KETONES, LIQUID, N.O.S. (6-Methyl-5-hepten-2-one)

UN NUMBER: 1224 CLASS: 3 PACKING GROUP: Ш

#### **REGULATORY INFORMATION SECTION 15.**

**SARA 302 COMPONENTS** NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

**SARA 313 COMPONENTS** THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL

> COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS FIRE HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

#### PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

6-Methyl-5-hepten-2-one 110-93-0

#### NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

6-Methyl-5-hepten-2-one 110-93-0

#### **CALIFORNIA PROP. 65 COMPONENTS**

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

#### SECTION 16. OTHER INFORMATION

#### FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H226 FLAMMABLE LIQUID AND VAPOUR.

H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

MSDS LEGEND

MW: MOLECULAR WEIGHT MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL

**HYGINISTS** 

CAS: CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV: THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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