

# SAFETY DATA SHEET

# SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 232538

NAME: Cyclopentan-1-one

SYNONYMS: Cyclopentanone

24 HOUR EMERGENCY

ET EDITOR

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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 SKIN IRRITATION (CATEGORY 2), H315 EYE IRRITATION (CATEGORY 2A), H319

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.

H315 CAUSES SKIN IRRITATION.

H319 CAUSES SERIOUS EYE IRRITATION.

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.

P241	USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/	
	LIGHTING/ EQUIPMENT.	
P242	USE ONLY NON-SPARKING TOOLS.	
P243	TAKE PRECAUTIONARY MEASURES AGAINST STATIC	
	DISCHARGE.	
P264	WASH SKIN THOROUGHLY AFTER HANDLING.	
P280	WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE	
	PROTECTION.	
P303 + P361 + P353	IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY ALL	
	CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/	
	SHOWER.	
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL	
	MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY	
	TO DO. CONTINUE RINSING.	
P332 + P313	IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/	
	ATTENTION.	
P337 + P313	IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/	
	ATTENTION.	
P362	TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE	
	REUSE.	
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR	
	ALCOHOL-RESISTANT FOAM FOR EXTINCTION.	
P403 + P235	STORE IN A WELL-VENTILATED PLACE. KEEP COOL.	
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED	
	WASTE DISPOSAL PLANT.	
HAZARDS NOT	NONE	
OTHERWISE		

**CLASSIFIED (HNOC) OR NOT COVERED** 

**BY GHS** 

#### **COMPOSITION/INFORMATION ON INGREDIENTS** SECTION 3.

MF:  $C_5H_8O$ 

MW: 84.12

CAS-NO. 120-92-3

PURITY:  $\geq$  99.9% (Assay)

# **HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION
CYCLOPENTANONE		
	FLAM. LIQ. 3; SKIN IRRIT. 2;	<= 100%
	EYE IRRIT. 2A; H226, H315,	
	H319	

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 RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT

**CONTACT** LEAST 15 MINUTES AND CONSULT A PHYSICIAN.

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

MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH

WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANTTHE MOST IMPORTANT KNOWN SYMPTOMS ANDSYMPTOMS ANDEFFECTS ARE DESCRIBED IN THE LABELLING (SEE

**EFFECTS, BOTH ACUTE** SECTION 2.2) AND/OR IN SECTION 11

AND DELAYED

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND

SPECIAL TREATMENT

**NEEDED** 

NO DATA AVAILABLE

# **SECTION 5. FIRE AND EXPLOSION DATA**

## **EXTINGUISHING MEDIA**

SUITABLE USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

**EXTINGUISHING MEDIA** CHEMICAL OR CARBON DIOXIDE.

**SPECIAL HAZARDS** CARBON OXIDES

ARISING FROM THE 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
PRECAUTIONS,
PROTECTIVE
EQUIPMENT AND
EMERGENCY
PROCEDURES

USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. BEWARE OF VAPOURS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPOURS CAN

ACCUMULATE IN LOW AREAS. FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PRECAUTIONS

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

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING 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 CONTACT WITH SKIN AND EYES. 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** 

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.

STORAGE CLASS (TRGS 510): FLAMMABLE LIQUIDS

**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**

APPROPRIATE ENGINEERING CONTROLS HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

## PERSONAL PROTECTIVE EQUIPMENT

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

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: 120 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** WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING **PROTECTION** RESPIRATORS ARE APPROPRIATE USE A FULL-FACI

RESPIRATORS ARE APPROPRIATE USE A FULL-FACE 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.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Liquid

ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE

**MELTING** 

POINT/FREEZING POINT INITIAL BOILING POINT AND BOILING RANGE

FLASH POINT 30 °C

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

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR EXPLOSIVE LIMITS

VAPOUR PRESSURE NO DATA AVAILABLE VAPOUR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY 0.95

WATER SOLUBILITY NO DATA AVAILABLE PARTITION COEFFICIENT: NO DATA AVAILABLE

N- OCTANOL/WATER

AUTO-IGNITION NO DATA AVAILABLE

**TEMPERATURE** 

DECOMPOSITION NO DATA AVAILABLE

**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

VAPOURS MAY FORM EXPLOSIVE MIXTURE WITH AIR.

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

**INCOMPATIBLE** STRONG OXIDIZING AGENTS, STRONG BASES, STRONG

MATERIALS REDUCING AGENTS

HAZARDOUS OTHER DECOMPOSITION PRODUCTS - NO DATA

**DECOMPOSITION** AVAILABLE

**PRODUCTS** IN THE EVENT OF FIRE: SEE SECTION 5

### SECTION 11. TOXICOLOGICAL INFORMATION

## INFORMATION ON TOXICOLOGICAL EFFECTS

**ACUTE TOXICITY** LC50 INHALATION - RAT - 19,500 MG/M3

REMARKS: LUNGS, THORAX, OR

RESPIRATION: DYSPNEA. LUNGS, THORAX, OR RESPIRATION: OTHER CHANGES. LIVER: OTHER

CHANGES.

DERMAL: NO DATA AVAILABLE

SKIN - RABBIT

**CORROSION/IRRITATION** RESULT: MILD SKIN IRRITATION

**SERIOUS EYE** EYES - RABBIT

**DAMAGE/EYE IRRITATION** RESULT: IRRITATING TO EYES. (OECD TEST GUIDELINE 405)

RESPIRATORY OR SKIN

**SENSITISATION** 

NO DATA AVAILABLE

GERM CELL MUTAGENICITY NO DATA AVAILABLE

**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.

ACGIH: NO COMPONENT OF THIS PRODUCT PRESENT AT 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 IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY OSHA.

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** RTECS: GY4725000

**INFORMATION** 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 - LEUCISCUS IDUS MELANOTUS - 2,950 MG/L - 48 H

LC0 - LEUCISCUS IDUS MELANOTUS - 2,760 MG/L - 48 H

TOXICITY TO DAPHNIA AND

LC50 - DAPHNIA MAGNA (WATER FLEA) - 1,800 MG/L - 24

OTHER AQUATIC **INVERTEBRATES** 

PERSISTENCE AND **DEGRADABILITY** 

NO DATA AVAILABLE

**BIOACCUMULATIVE** 

**POTENTIAL** 

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND VPVB ASSESSMENT

PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL

SAFETY ASSESSMENT NOT REQUIRED/NOT

CONDUCTED

OTHER ADVERSE EFFECTS NO DATA AVAILABLE

#### **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. CONTACT A LICENSED PROFESSIONAL WASTE

DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

**CONTAMINATED PACKAGING** 

DISPOSE OF AS UNUSED PRODUCT.

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

DOT (US)

PROPER SHIPPING NAME: **CYCLOPENTANONE** 

UN NUMBER: 2245 CLASS: 3 PACKING GROUP: III

REPORTABLE QUANTITY

(RQ):

POISON INHALATION NO

HAZARD:

**IMDG** 

PROPER SHIPPING NAME: CYCLOPENTANONE

UN NUMBER: 2245
CLASS: 3
PACKING GROUP: III
EMS-NO: F-E, S-D

**IATA** 

PROPER SHIPPING NAME: CYCLOPENTANONE

UN NUMBER: 2245 CLASS: 3 PACKING GROUP: III

## **SECTION 15. REGULATORY INFORMATION**

**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 (DEMINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS FIRE HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Cyclopentan-1-one 120-92-3 4/24/1993

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Cyclopentan-1-one 120-92-3 4/24/1993

**NEW JERSEY RIGHT TO KNOW COMPONENTS** 

CAS-NO. REVISION DATE

Cyclopentan-1-one 120-92-3 4/24/1993

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.

EYE IRRIT. EYE IRRITATION

FLAM. LIQ. FLAMMABLE LIQUIDS

H226 FLAMMABLE LIQUID AND VAPOUR.

H315 CAUSES SKIN IRRITATION.

H319 CAUSES SERIOUS EYE IRRITATION.

SKIN IRRIT. SKIN IRRITATION

**HMIS RATING** 

HEALTH HAZARD: 0

CHRONIC HEALTH

HAZARD:

FLAMMABILITY: 3 PHYSICAL HAZARD 0

**NFPA RATING** 

HEALTH HAZARD: 0 FIRE HAZARD: 3 REACTIVITY HAZARD: 0

**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)

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