

# SAFETY DATA SHEET



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## 24-Hour Emergency Number (CHEMTREC)

USA: 800-424-9300  
International: 703-527-3887

All non-emergency numbers should be directed  
to Customer Service at 800-PURITY1

## CYCLOPENTANONE

SDS No. M0050

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cyclopentanone

Synonyms: Ketocyclopentane; Ketopentamethylene; Adipic Ketone, Dumasin

Recommended Use: This product is recommended for laboratory and manufacturing use only. It is not recommended for drug, food or household use.

### 2. HAZARDS IDENTIFICATION



#### **Classification:**

Flammable Liquids: GHS Category 3

Skin Irritation: GHS Category 2

Eye Irritation: GHS Category 2A

#### **Label Elements**

Signal Word: DANGER!

#### Hazard Statements:

- H226 – Flammable liquid and vapor..
- H302 – Harmful if swallowed.
- H315 – Causes skin irritation.
- H320 – Causes eye irritation.
- H332 – Harmful if inhaled.
- H336 – May cause drowsiness and dizziness.

#### Precautionary Statements:

- P210 – Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- 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.

#### **Emergency Overview**

Harmful if swallowed or inhaled. Causes irritation to skin, eyes, and respiratory tract. Affects central nervous system. Flammable liquid and vapor. Target Organs: Central nervous system.

Clear focus. Consistent results. Complete confidence.

HMIS Rating:

Health – 2 Flammability – 3 Physical Hazard – 0 PPE – User supplied

NOTE: HMIS ratings use a numbering scale that ranges from 0 - 4 to indicate the degree of hazard. A value of zero means the chemical presents no hazard while a value of four indicates a high hazard. These ratings are based on the inherent properties of this chemical under expected conditions of normal use and are not intended to be used in emergency situations. PPE is determined by the user based on their needs and conditions.

**3. COMPOSITION AND INFORMATION ON INGREDIENTS**

<u>Ingredient</u>	<u>CAS No</u>	<u>Percent</u>	<u>Hazardous</u>
Cyclopentanone	120-92-3	>99%	Yes

**4. FIRST-AID MEASURES**

Inhalation: If inhaled, remove to fresh air. If breathing is labored or with coughing, give oxygen. If not breathing, begin artificial respiration. Get medical aid.

Ingestion: Get medical aid. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation persists. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention.

Notes to Physician: Treat symptomatically and supportively.

**5. FIRE FIGHTING MEASURES**

Flammability: Flammable liquid and vapor (GHS Category 3)

Auto-ignition Temperature: Not available

Flash Point: 26° C (79° F)

Flammable Limits: Lower Limit – Not available

Products of Combustion: Will decompose into highly toxic and irritating gases (carbon monoxide and carbon dioxide) under fire conditions.

Specific Fire Hazards: As in any fire, always wear self-contained breathing apparatus in pressure-demand (MSA/NIOSH approved or equivalent), and full protective gear. Use water spray to keep fire exposed containers cool. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Material floats on water and may travel to a source of ignition and spread fire.

Specific Explosion Hazards: Containers may explode in the heat of a fire.

Fire Fighting Media: Water spray, dry chemical, alcohol foam, or carbon dioxide. Do not allow water runoff to enter sewers or waterways.

National Fire Protective Association: Health - 2, Flammability - 3, Reactivity - 0

NOTE: NFPA ratings use a numbering scale that ranges from 0 - 4 to indicate the degree of hazard. A value of zero means the chemical presents no hazard while a value of four indicates a high hazard. They are for use by emergency personnel to address the hazards that are presented by short term, acute exposure to this product under fire, spill, or similar emergencies. Ratings involve data and interpretations that may vary from company to company.

**6. ACCIDENTAL RELEASE MEASURES**

Absorb spilled liquid with sorbent pads, socks, or other inert material such as vermiculite, sand, or earth. Provide ventilation to the affected area and remove all ignition sources. Avoid run-off into storm sewers and ditches that lead to waterways. Approach the spill from upwind and pick up absorbed material and place it in a suitable container. Use only non-sparking tools and equipment. A vapor suppressing foam may be used. Always use proper personal protective equipment as described in section 8.

## 7. HANDLING AND STORAGE

Precautions: Always use proper personal protective equipment as described in section 8. Wash thoroughly after handling. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Remove contaminated clothing and wash before reuse. Empty containers contain product residue (liquid and vapor) and can be dangerous. Keep container tightly closed and away from heat, spark, and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks, or open flames. Use with adequate ventilation. Avoid breathing vapor or mist.

Storage: Keep in a flammables area away from all sources of ignition and oxidizing materials. Keep in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or using the material should be equipped with eyewash station and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protection: Wear chemical splash goggles or appropriate eye protection. Use appropriate protective gloves and protective clothing to prevent skin exposure. A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever possible. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Exposure Limits: None established

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State and Appearance: Clear, colorless to water-white liquid.

Odor: Peppermint odor

Molecular Formula: C<sub>5</sub>H<sub>8</sub>(=O)

Molecular Weight: 84.12

Auto-ignition Temperature: Not available

Flash Point: 26° C (79° F)

Flammable Limits: Lower Limit – Not available

pH: Not available.

Boiling Point: 130° C (268° F)

Freezing/Melting Point: -52° C (-72° F)

Decomposition Temperature: Not available

Specific Gravity: 0.9509 g/cm<sup>3</sup> @ 20° C

Vapor Density (Air=1): 2.3

Vapor Pressure: 11.4 mm Hg @ 20° C.

Evaporation Rate (Butyl acetate = 1): Not available

Viscosity: Not available

Solubility: Slight (0.1-1%)

## 10. STABILITY AND REACTIVITY

Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Ignition sources, excess heat, and incompatible materials.

Incompatibility With Various Substances: Strong oxidizing agents, strong acids, strong bases. An explosive reaction occurs with hydrogen peroxide + nitric acid and acids.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Polymerizes easily, especially in the presence of acids.

## 11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, skin absorption, skin contact

**Acute Exposure Hazards:**

**INHALATION HAZARD:** Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. High concentrations have a narcotic effect. Can cause dizziness and lightheadedness. May cause central nervous system depression and unconsciousness.

**INGESTION HAZARD:** Large oral doses may produce gastro-intestinal disturbances. Material is moderately toxic.

**SKIN CONTACT HAZARD:** Causes irritation to skin. Symptoms include redness, itching, and pain. Can cause severe irritation, possible skin burns.

**EYE CONTACT HAZARD:** Causes irritation, redness, and pain. May cause severe irritation and pain. May cause burns.

**Chronic Exposure Hazards:** No information found.

**Animal Toxicity:**

Draize, rabbit, skin: 500 mg mild;

Draize, rabbit, eye: 100 mg sever;

**Carcinogenicity:** Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** No information available.

**Neurotoxicity:** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No information available.

**Environmental Fate:** When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material may evaporate to a moderate extent. When released into water, this material is expected to readily biodegrade. When released into water, this material may evaporate to a moderate extent. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals.

**13. DISPOSAL CONSIDERATIONS**

Material that cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Processing, use or contamination of this product may change the waste management options. Waste generators must decide if discarded material is a hazardous waste. State and local disposal regulations may differ from federal disposal definitions found in 40 CFR 261.3. Dispose of container and unused contents in accordance with federal, state and local requirements.

**14. TRANSPORT INFORMATION****US DOT, IATA, IMO**

Proper Shipping Name: Cyclopentanone

Hazard Class: 3

UN Number: UN2245

Packing Group: III

**Canada TDG**

Additional Information: 26 C

**15. REGULATORY INFORMATION****US Federal Regulations:**

TSCA: CAS# 120-92-3 is listed on the TSCA Inventory.

Health and Safety Reporting List: CAS# 120-92-3: Not listed.

Chemical Test Rules: CAS# 120-92-3: Not listed.

Section 12b: CAS# 120-92-3 is not listed.

TSCA Significant New Use Rule: Does not have an SNUR under TSCA.

CERCLA Hazardous Substances: CAS# 120-92-3 – Does not have a final RQ

SARA Section 302: Does not have a TPQ

SARA Codes: CAS# 120-92-3 – acute, fire

Section 313: Cyclopentanone (CAS# 120-92-3) is not subject to SARA Title III Section 313 and 40 CFR 373 reporting requirements.

Clean Air Act: CAS# 120-92-3 is not listed as a hazardous air pollutant (HAP). It is not a Class 1 Ozone Depleter. It is not a Class 2 Ozone Depleter.

Clean Water Act: CAS# 120-92-3 is not listed as a Hazardous Substance. It is not a Priority Pollutant. It is not a Toxic Pollutant.

OSHA: Not considered highly hazardous by OSHA.

US State Regulations:

CAS# 120-92-3 is on the following state right-to-know lists: Florida, New Jersey, Pennsylvania, and Massachusetts  
California Prop 65: California No Significant Risk Level: Not listed

Canada:

DSL/NDSL: CAS# 120-92-3 is listed on Canada's DSL list.

WHMIS: This product has a WHMIS classification of B2, D2B. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and this MSDS contains all the information required by those regulations.

DSCL (EEC):

Hazard Symbols: Xn; F

Risk Phrases: R10 – Flammable; R36/38 – Irritating to eyes and skin.

Safety Phrases: S23 – do not inhale gas /fumes/vapor/spray..

WGK (Water Danger/protection): CAS# 120-92-3: 1

## 16. OTHER INFORMATION

Originally Prepared: 1/1/2006

Last Revised: 12/16/2011 – Converted to GHS format.

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