

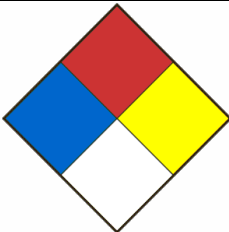


SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier CYCLOPENTANE		Product Use Laboratory use	
Chemical formula C ₅ H ₁₀		Product code CR-0825	Molar weight 70,14
Chemical name / Commercial name / Synonymous PENTAMÉTHYLÈNE			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 Lun-Ven 8h-16h	
Emergency phone	418-660-8666 Lun-Ven 8h-16h	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 6/19/2024	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Flammable liquids category 2		
Signal Word	DANGER		
Hazards statements (H)	H225 Highly flammable liquid and vapor.		
Precautionary statements (P)	P210 Keep away from heat, sparks, open flames, hot surfaces. — No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P280 Wear protective gloves, protective clothing and eye and face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction. P403 + P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.		
PICTOGRAMS			
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)		
	Health 1 Fire 4 Reactivity 0 Special danger		

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Cyclopentane	287-92-3	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Do not use the mouth-to-mouth method if the victim has ingested or inhaled the substance, apply artificial respiration with a pocket mask equipped with a one-way valve or other suitable medical device. Consult a physician.
Ingestion	If the person is conscious, drink water and do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Dizziness. Nausea and vomiting. Skin, eye and respiratory system irritation. Pulmonary edema. Irritation of mouth and stomach if swallowed. Unconsciousness. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	Yes
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Water may not be effective, Do not use a solid water stream to prevent dispersion and the spread of fire.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides.
Specific hazards of the dangerous product	Extremely flammable. Risk of ignition. Containers may explode when heated. Vapors may form explosive mixtures with air. May react violently with incompatible products (Ref Section 10). Vapors may form explosive mixtures with air. Vapors may rise to the source of ignition and flash back.
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Cut off all sources of ignition. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapors, mist or gas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from strong oxidants, heat, sparks and open flame. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks). Protect from the sun's rays.
Methods of handling	Bottle in the glass only. Avoid contact with the skin, eyes and clothes. Avoid ingestion and inhalation. Wear personal protective equipment when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control parameters	Value	Basis
Cyclopentane	287-92-3	TWA	600 ppm 1720 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	600 ppm	Canada. British Columbia OEL
		VEMP	600 ppm 1720 mg/m ³	Quebec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with gloves. Suggested material: Nitrile. Viton® (Fluoroelastomer). The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Liquide clair.
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Sans objet.
Melting point / Freezing point	-94°C
Initial boiling point	50°C
Boiling range	Data not available
Flash point	-37°C
Evaporation rate	Data not available
Flammability	Yes
Lower flammable / Explosive limit	1.1%
Upper flammable / Explosive limit	8.7%
Vapour pressure	257.25 mm @ 20°CmmHg
Vapour density	Data not available
Relative density	0.751g/cm ³
Solubility	Insoluble dans l'eau. Miscible avec l'alcool et l'éther.
Partition coefficient water/n-octanol	0.001-
Auto-ignition temperature	361°C
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Flammable product, may ignite with source of ignition, if temperature above flash point. May react violently with incompatible substances. May form explosive mixtures with air on intense heating. May ignite on contact with oxidants.
Chemical stability	Stable under recommended storage conditions. Sensitive to heat.
Possibility of hazardous reactions	Vapors may form explosive mixture with air. Highly flammable liquid and vapors.
Conditions to avoid, including static discharge, shock or vibration	Heat, flames and sparks. Avoid the accumulation of static electricity. Avoid contact with incompatible materials and extreme temperatures.
Incompatible materials	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), heat and moisture.
Hazardous decomposition products	Toxic vapors of carbon monoxide and dioxide.

SECTION 11 - TOXICOLOGICAL INFORMATION

CYCLOPENTANE

Routes of exposure	Ingestion, inhalation, skin contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and tearing.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Narcotic effects, cough, dyspnea, headache, dizziness, excitement, incoordination, nausea and vomiting. Inhalation of high concentrations may cause respiratory depression, stupor, loss of consciousness and coma.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Gastrointestinal disorders, cramps, diarrhea, headache, dizziness, drowsiness, seizures, nausea and vomiting. NOTE: Aspiration of the product into the lungs may cause chemical pneumonitis, hemorrhagic pulmonary edema resulting in rapid death from cardiac arrest, respiratory paralysis and asphyxia.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, narcotic effects, chest pain, cough, dyspnea, headache, dizziness, confusion, drowsiness, irritability, watery eyes, fatigue, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Dermal: Data not available. LD50 Oral - Rat -> 2,000 mg / kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 25.3 mg/L.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 10.52mg/L - 48h.
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	Do not throw residues in the sewer.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1146
UN Proper shipping name	CYCLOPENTANE
Transport hazard class(es)	3 Flammable liquids
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 2
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SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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