

CYCLOPENTANE
CAS No. 287-92-3

Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: Cyclopentane.

Other means of identification: /

Recommended use of the chemical and restrictions on use: This material can be used as analytical reagent, solvent, etc.

Supplier's details: Dongying Liangxin Petrochemical Technology Development Co., Ltd

Emergency phone number: +86 178 1030 0898

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Flammable liquids Category 2

Hazardous to the aquatic environment, long-term hazard Category 3

GHS Label elements, including precautionary statements:



Signal word: Danger

Hazard statement(s): Highly flammable liquid and vapor. Harmful to aquatic life with long lasting effects.

Precautionary statement(s):

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/...] equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response:

In case of fire: Use carbon dioxide, foam or chemical powder to extinguish. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Cyclopentane	287-92-3	80%
Isopentane	78-78-4	20%

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Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Use alcohol-resistant foam, chemical powder or carbon dioxide.

Special hazards arising from the chemical: Liquid and vapour are highly flammable. May explode and burn in high temperature and fire and release toxic fumes.

Special protective actions for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary. 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 vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

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 collect with pump and place in a clean container for disposal according to local regulations.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Wear protective gloves/eye protection/face protection/protective clothing. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking.

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. Keep away from flammable materials and oxidizers.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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Control parameters: /

Appropriate engineering controls: Local exhaust ventilation or a process enclosure ventilation system may be required.

Individual protection measures

Eye/face protection: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Skin protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber. Impervious clothing,

Respiratory protection: Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc)	Colorless transparent liquid.
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	-94°C.
Initial boiling point and boiling range	49°C.
Flash point	<21.0°C.
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	1.1%-8.7%.
Vapour pressure	45 kPa (20°C).
Vapour density	2.4.
Relative density	0.7 (20°C).
Solubility(ies)	Insoluble in water.
Partition coefficient: n-octanol/water	3.0.
Auto-ignition temperature	320°C.
Decomposition temperature	/
Viscosity	0.44 mPa/s (20°C).

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: This material is stable in normal temperature.

Possibility of hazardous reactions: The vapour is heavier than air and may travel along the ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated.

Conditions to avoid: Spark, high temperature and static electricity.

Incompatible materials: Flammable materials and oxidizers.

Hazardous decomposition products: Oxycarbides.

Section 11 TOXICOLOGICAL INFORMATION

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Information on the likely routes of exposure: Inhaled, swallowed, skin, eyes.
Symptoms related to the physical, chemical and toxicological characteristics: /
Acute health effects: Accidental ingestion of the material may be harmful and cause cough and throat irritation. Oral intake cause bellyache, nausea, vomit and other symptoms. This material may produce skin and eyes irritation.
Chronic health effects: Repeated or prolonged contact with skin may cause dryness and cracking and dermatitis.
Numerical measures of toxicity(such as acute toxicity estimates):
 LD50(Oral, rat): >2000 mg/kg

Section 12 ECOLOGICAL INFORMATION

Toxicity: Harmful to aquatic life with long lasting effects.
Persistence and degradability: Low.
Bioaccumulative potential: Low (LogKOW = 3).
Mobility in soil: Low (KOC = 89.71).
Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Burial in a land-fill specifically licensed to accept chemical. Reuse of broken container is forbidden.

Section 14 TRANSPORT INFORMATION

UN number: 1146.
UN proper shipping name: CYCLOPENTANE.
Transport hazard class(es) : 3.
Packing group, if applicable: II.
Environmental hazards: /
Special precautions for user: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB 16483-2008, GB 13690-2009, GB/T 15098-2008, GB 18218-2009, GB 15258-2009, GB 6944-2012, GB 190-2009, GB 191-2009, GB 12268-2008, GA 57-1993, GBZ 2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation [Published by the Ministry of Railways, 2008], Dangerous Chemicals Safety Administrative Regulation [Published by the State Council, 2011].

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
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