

## Safety Data Sheet

### 1. Product and company identification

Product name : Cyclopentyl methyl ether, dehydrated  
Name of manufacturer : KANTO CHEMICAL CO., INC.  
Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan  
Name of section : Business Administration Department, Reagent Division  
Telephone number : +81-3-6214-1090  
Facsimile number : +81-3-3241-1047  
Mail address : BC32@kanto.co.jp  
SDS No. : 08282

### 2. Summary of danger and Hazard

#### GHS classification

##### Physical and chemical hazard

Flammable liquids : Category 2  
Pyrophoric liquids : Out of category

##### Human health hazard

Acute toxicity(oral) : Category 4

#### Pictogram or symbol



Signal word : Danger  
Hazard statement : Highly flammable liquid and vapor  
Harmful if swallowed

#### Cautions

Safety measurements : Keep away from ignition sources such as heat, sparks, or open flame.  
Keep containers tightly closed.  
Ground container and receiving equipment in case of transport and stirring.  
Use explosion-proof apparatus.  
Use only non-sparking tools.  
Do not eat, drink or smoke when using this product.  
Wear appropriate protective gloves, glasses, clothing, face shield, or mask.  
Wash hands thoroughly after handling.

First-aid measures : If swallowed: Rinse mouth. Get medical treatment if you feel unwell.  
If on skin : Remove contaminated clothing and the substance. Wash with plenty of water.

Storage : Store in a cool and well-ventilated area.

Disposal : Dispose of contents and containers appropriately in accordance with related regulations.

### 3. Composition/Information on ingredients

Substance/Mixture : Substance  
Chemical name or commercial name : Cyclopentyl methyl ether  
Ingredients and composition : Cyclopentyl methyl ether min. 99.0%  
Chemical formula : C<sub>5</sub>H<sub>9</sub>OCH<sub>3</sub>  
CAS No. : 5614-37-9  
TSCA Inventory : Registered  
EINECS No. : -  
Dangerous and hazardous ingredients : Cyclopentyl methyl ether

#### 4. First aid measures

Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.  
Skin contact : Wash the affected areas under running water.  
Eye contact : Wash the affected areas under running water for at least 15 minutes. If necessary, get medical treatment.  
Ingestion : Rinse mouth with water. Give the victim one or two glasses of water or milk. Do not induce vomiting. Get medical treatment as soon as possible.

#### Protection for first aid person

: Rescuers should wear proper protective equipment like rubber gloves, goggles.

#### 5. Fire fighting measures

Extinguishing media : Dry chemical powder, carbon dioxide, dry sand, foam

Prohibited extinguishing media

: Water spray

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire.

#### Protection for firefighters

: Wear breathing apparatus.

#### 6. Accidental release measures

Cautions for personnel : Wear proper protective equipment and avoid contact with skin and inhalation of vapor. Conduct operations from upwind and evacuate people downwind. Remove all sources of ignition. Keep away personnel except for authorized ones from spillage area by stretching ropes.

Cautions for environment : Attention should be given to avoid discharge of spilled product into rivers and resulting environmental damage. When diluting spill with large amounts of water, discharge of untreated wastewater into the environment must be avoided.

Removal measure : Absorb spill with inert material (e.g., diatomaceous earth, sand) and flush spillage area with copious amounts of water.

Prevention of second accident

: Remove nearby sources of ignition and prepare extinguishing media.

## 7. Cautions of handling and storage

### Handling

Engineering measures : Wear proper protective equipment to avoid contact with skin or inhalation of vapor. Fire is strictly prohibited.  
Ventilate well at working places.

### Cautions for safety handling

: Use with an enclosed system or a local exhaust ventilation. Use in well-ventilated areas.

Cautions : Do not allow contact with oxidizing substances.

### Storage

#### Adequate storage condition

: Store in a dark, cool place and tightly closed.

#### Safety adequate container materials

: Glass, fluorine resin

## 8. Exposure control/Personal protection

Engineering measures : Use with an enclosed system or a local exhaust ventilation.

### Control parameters

ACGIH(2015) : Not established

### Protective equipment

#### Respiration protective equipment

: If necessary, wear chemical cartridge respirator with an organic vapor cartage

#### Hands protective equipment

: Impervious protective gloves

#### Eyes protective equipment

: Safety goggles

#### Skin and body protective equipment

: Protective clothing, protective boots

## 9. Physical and chemical properties

Appearance : Liquid

Color : Colorless

Odor : Ethereal odor

Boiling point : 106°C

Melting point : below -140°C

Flash point : -1°C

Auto-ignition point : 180°C

### Explosion characteristics

Explosion limit : upper : 9.9vol% lower : 1.1vol%

Vapor pressure : 44.9hPa(25°C)

Vapor density : 3.5

Density : 0.86g/cm<sup>3</sup> (20°C)

Solubility

Solubility in solvents : Water ; 11g/L(20°C)  
Organic solvents ; Readily soluble in ethanol, diethyl ether,  
benzene.

log Pow : 1.59

10. Stability and reactivity

Stability : Stable under normal conditions.  
Reactivity : May react with oxidizing substances.  
Incompatible conditions : Light, heat  
Incompatible materials : Oxidizing substances  
Hazardous decomposition products  
: Carbon monoxide

11. Toxicological information

Acute toxicity : Harmful if swallowed(category 4)  
Dermal : Not possible to classify because of insufficient data.  
Inhalation(vapor) : Not possible to classify because of insufficient  
data.  
Inhalation(dust, mist) : Not possible to classify because of  
insufficient data.  
rat oral LD50=1000-2000mg/kg  
Skin corrosion/irritation : Not possible to classify because of insufficient data.  
Serious eye damage/eye irritation  
: Not possible to classify because of insufficient data.  
Respiratory sensitization or Skin sensitization  
: Respiratory sensitization : Not possible to classify because of  
insufficient data.  
Skin sensitization : Not possible to classify because of insufficient  
data.  
Mutagenicity : Not possible to classify because of insufficient data.  
Carcinogenic effects : Not possible to classify because of insufficient data  
Effects on the reproductive system  
: Not possible to classify because of insufficient data.  
Specific target organ systemic toxicity single exposure  
: Not possible to classify because of insufficient data.  
Inhalation exposure may causes irritation to nose and throat. However,  
classification is not possible due to lack of data.  
Specific target organ systemic toxicity repeated exposure  
: Not possible to classify because of insufficient data.  
Aspiration hazard : Not possible to classify because of insufficient data.

12. Ecological information

Ecotoxicity  
Fish toxicity : Acute aquatic toxicity : Not possible to classify because of  
insufficient data.

Chronic aquatic toxicity : Not possible to classify because of insufficient data.

Persistence and degradability

: Not available

Bioaccumulative potential : Not available

13. Disposal consideration

Residual disposal : Burn in a chemical incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal.

Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

UN class : Class 3(Flammable liquids) P. G. II

UN number : 3271

Marine regulation information

UN No. : 3271

Proper shipping name : ETHERS, N. O. S

Class : 3

Sub risk : -

Packing group : II

Marine pollutant : Not applicable

Aviation regulation information

UN No. : 3271

Proper shipping name : ethers, n. o. s.

Class : 3

Sub risk : -

Packing group : II

15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

References

Dictionary of Organic Compounds, The society of Synthetic Organic Chemistry, Kodansha Ltd. (1985)

Dangerous Properties of Industrial Materials, 6th ed. N. I. Sax Van Nostrand Reinhold Company (1984)

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product. The Safety Data Sheet (SDS) is prepared based on JIS Z7253, and it has the same required elements on the Material Safety Data Sheet (MSDS) which is prepared based on JIS Z7250:2010.