

Safety Data Sheet

#90027128 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Cyclopentyl methyl ether	5614-37-9	C5H9OCH3	10	07 Aug 2026

SECTION 1

Identification

Product name	Cyclopentyl methyl ether
CAS number	5614-37-9
Chemical formula	C5H9OCH3
Molecular weight	100.16
SMILES	COC1CCCC1
EC / EINECS number	445-090-6
Recommended use & restrictions	For research and development purposes only. Not suitable for human consumption or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

**DANGER**

CODE	HAZARD STATEMENT
EUH019	May form explosive peroxides
H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H402	Harmful to aquatic life

CODE	PRECAUTIONARY STATEMENT
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352	IF ON SKIN: Wash with soap and water
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing

Other hazards (e.g. PBT / vPvB, not classified)	May form explosive peroxides. Does not contain components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB). Does not contain components considered to have endocrine-disrupting properties. Does not meet PBT or vPvB criteria under REACH Annex XIII.
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SECTION 3

Composition / information on ingredients

Purity / concentration	100 % Cyclopentyl methyl ether (CAS: 5614-37-9)- H225, H302, H315, H319, EUH019
Impurities / stabilising additives	None

SECTION 4

First-aid measures

Inhalation	Move to fresh air, keep warm, and seek medical attention if symptoms persist.
Skin contact	Rinse with water. Remove contaminated clothing and rinse skin with water or shower.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.
Ingestion	Rinse mouth thoroughly, give small glasses of water or milk to drink (if conscious). Never give anything by mouth to an unconscious person. Seek medical attention if symptoms persist.
Symptoms / effects & medical attention	<i>Not applicable</i>

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Alcohol-resistant foam, carbon dioxide, dry powder, or water fog.
Unsuitable extinguishing media	None known
Special hazards	Carbon oxides Combustible. Pay attention to flashback. Vapours are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

Personal precautions & PPE	Wear protective clothing (Section 8). Evacuate area. Avoid ignition sources. Do not touch spilled material.
Environmental precautions	Avoid discharge into drains, watercourses, or ground. Prevent aquatic environment contamination.
Containment & clean-up methods	Absorb small spills with paper towels and evaporate safely. For large spills, dilute with water (if soluble) or absorb with inert material. Dispose of waste safely (Section 13).

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Wear protective clothing (Section 8). Keep away from food, drink, and animal feeding stuffs. Avoid spills. Keep container tightly sealed. Avoid mists. Keep away from ignition sources. No smoking.
Conditions for safe storage (incompatibilities)	Air and light sensitive. Store under inert gas. May form explosive peroxides.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data	DNEC: Chronic effects systemic (Dermal): 0.448 mg/kg bw/day Chronic effects systemic (Inhalation): 16.9 mg/m3 PNEC: Fresh water: 0.124 mg/L Fresh water sediment: 1.91 mg/kg sediment dw Microorganisms in sewage treatment: 100 mg/L Soil (Agriculture): 0.309 mg/kg soil dw Marine water: 12.4 µg/L Marine water sediment: 0.191 mg/kg sediment dw
Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Recommended gloves (splash contact): Viton rubber (fluorinated rubber), 0.7mm (240 mins).
Respiratory protection	Full-face respirator Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	0.86 g/mL DERIVED FROM: LITERATURE
Flash point	-1 °C DERIVED FROM: LITERATURE
Acidity	Neutral DERIVED FROM: LITERATURE
Appearance / physical state	Liquid DERIVED FROM: LITERATURE
Colour	Colourless DERIVED FROM: LITERATURE
Odour	Not known DERIVED FROM: LITERATURE
Melting / freezing point	-25°C DERIVED FROM: LITERATURE
Boiling point	107°C DERIVED FROM: LITERATURE
Solubility (water)	12.5 g/l at 20 °C DERIVED FROM: LITERATURE
pH	Not specified DERIVED FROM: LITERATURE
Vapour pressure	42.7 hPa DERIVED FROM: LITERATURE
Partition coefficient (log Pow)	1.6 DERIVED FROM: LITERATURE
Auto-ignition / decomposition temp	185.5°C DERIVED FROM: LITERATURE

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under normal conditions but may form explosive peroxides under certain conditions. Violent reactions possible with: Oxidizing agents Acids hydrogen peroxide hydrazines
Conditions to avoid	Heat, sparks, open flames, ignition sources, and prolonged exposure to air (peroxide formation).
Incompatible materials	Strong oxidizers, acids, and other ignition sources.
Hazardous decomposition products	See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	LD50 Oral - Rat - male and female - 200 - 2,000 mg/kg Ref: External SDS LC50 Inhalation - Rat - male and female - 4 h - > 21.5 mg/l - vapour Ref: External SDS LD50 Dermal - Rat - male and female - > 2,000 mg/kg Ref: External SDS
Skin corrosion / irritation	Causes skin irritation
Eye corrosion / irritation	Causes serious eye irritation
Respiratory / skin sensitisation	Not classified
Carcinogenicity	Not classified
Mutagenicity	<i>Not applicable</i>
Reproductive toxicity	<i>Not applicable</i>
STOT (single / repeated exposure)	Not classified
Aspiration hazard	Not classified
Endocrine disruptors	Not classified

SECTION 12

Ecological information

Aquatic toxicity	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 220 mg/l - 96 h static test EC50 - Daphnia magna (Water flea) - 35 mg/l - 48 h static test NOEC - Daphnia magna (Water flea) - 20 mg/l - 48 h static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h static test NOEC - Pseudokirchneriella subcapitata (green algae) - 2.2 mg/l - 72 h static test EbC50 - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h static test EC50 - activated sludge - > 100 mg/l - 3 h static test NOEC - activated sludge - 100 mg/l - 3 h semi-static test NOEC - Daphnia magna (Water flea) - 1.24 mg/l - 21 d
Persistence & degradability	aerobic - Exposure time 28 d Result: ca.2 % - Not readily biodegradable.
Bioaccumulative potential	<i>Not applicable</i>
Mobility in soil	<i>Not applicable</i>
PBT / vPvB assessment	Not classified as PBT or vPvB according to current EU criteria.

SECTION 13

Disposal considerations

Waste treatment / disposal methods	Dispose of contents/container in accordance with national regulations.
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SECTION 14

Transport information

UN number	UN3271
Proper shipping name	ETHERS, N.O.S
Class	3
Packing group	II
Transport category	2
Tunnel code	(D/E)
Packing instruction (ADR)	P001
Packing instruction (IMDG)	P001
Environmental hazards	Flammable liquid. May pollute watercourses.
Special precautions for user	Keep away from ignition sources. Prevent water pollution.



SECTION 15

Regulatory information

REACH code	Y110
UFI code	<i>Not applicable</i>
ECHA notification	<i>Not applicable</i>
Chemical safety assessment carried out?	<i>Not applicable</i>

SECTION 16

Other information

Revision notes / other information	Eye/Face protection standard: EN ISO 16321:1-2022 Respiratory protection standard: EN 14387
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