

# Safety Data Sheet

#48936167 · 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 |
|----------------------|------------|---------|---------|---------------|
| Methylcyclohexane SG | 108-87-2   | C7H14   | 10      | 28 Sep 2026   |

## SECTION 1

### Identification

#### 1.1 Product identifier

**Product name** Methylcyclohexane SG

**CAS number** 108-87-2

**EC / EINECS number** 203-624-3

**Chemical formula** C7H14

**Molecular weight** 98.19

**SMILES** CC1CCCCC1

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

For research use only. Not for human or veterinary use

#### 1.3 Details of the supplier of the safety data sheet

Molekula Limited  
1 Millennium Way, Newton Aycliffe  
Durham, DL5 6JW, United Kingdom  
info@molekula.com · +44 (0) 3302 000333

#### 1.4 Emergency telephone number

**0344 892 0111** — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

## SECTION 2

### Hazard identification

#### 2.1 Classification of the substance or mixture

Flam. Liq. 2; H225

Asp. Tox. 1; H304

Skin Irrit. 2; H315

STOT SE 3; H336

Aquatic Chronic 1; H410

## 2.2 Label elements



**DANGER**

| CODE | HAZARD STATEMENT |
|------|------------------|
|------|------------------|

|             |                                                      |
|-------------|------------------------------------------------------|
| <b>H225</b> | Highly flammable liquid and vapour                   |
| <b>H304</b> | May be fatal if swallowed and enters airways         |
| <b>H315</b> | Causes skin irritation                               |
| <b>H336</b> | May cause drowsiness or dizziness                    |
| <b>H410</b> | Very toxic to aquatic life with long lasting effects |

| CODE | PRECAUTIONARY STATEMENT |
|------|-------------------------|
|------|-------------------------|

|                       |                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------|
| <b>P210</b>           | Keep away from heat/sparks/open flames/hot surfaces - No smoking                                |
| <b>P260</b>           | Do not breathe dust/fume/gas/mist/vapours/spray                                                 |
| <b>P273</b>           | Avoid release to the environment                                                                |
| <b>P280</b>           | Wear protective gloves/protective clothing/eye protection/face protection                       |
| <b>P301+P330+P331</b> | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting                                               |
| <b>P304+P340</b>      | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing |

## 2.3 Other hazards

Does not meet PBT or vPvB criteria under REACH Annex XIII. Does not contain components considered to have endocrine-disrupting properties

## SECTION 3

**Composition / information on ingredients****3.1 Substances**

|                                                                 |                                                                                                              |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Name</b>                                                     | Methylcyclohexane SG                                                                                         |
| <b>CAS number</b>                                               | 108-87-2                                                                                                     |
| <b>EC number</b>                                                | 203-624-3                                                                                                    |
| <b>Concentration / purity</b>                                   | c. 100%                                                                                                      |
| <b>Classification according to Regulation (EC) No 1272/2008</b> | Flam. Liq. 2; H225<br>Asp. Tox. 1; H304<br>Skin Irrit. 2; H315<br>STOT SE 3; H336<br>Aquatic Chronic 1; H410 |
| <b>Hazard statements</b>                                        | H225, H304, H315, H336, H410                                                                                 |
| <b>Acute toxicity estimate (ATE)</b>                            | <i>No data available</i>                                                                                     |
| <b>Impurities / stabilising additives</b>                       | <i>Not applicable</i>                                                                                        |

## SECTION 4

**First-aid measures****4.1 Description of first aid measures**

|                     |                                                                                                                                                                    |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Remove person to fresh air and keep comfortable for breathing.<br>Immediately call a POISON CENTER/doctor.                                                         |
| <b>Skin contact</b> | Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention.                                                                   |
| <b>Eye contact</b>  | Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.                                     |
| <b>Ingestion</b>    | After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise. |

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

*No data available*

## SECTION 5

### Fire-fighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** For this substance/mixture no limitations of extinguishing agents are given.

**Unsuitable extinguishing media** None known

#### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon oxides  
Combustible.

#### 5.3 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.

## SECTION 6

### Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.

#### 6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

#### 6.3 Methods and material for containment and cleaning up

Absorb spillage with a suitable absorbent material.

#### 6.4 Reference to other sections

*For specific precautions, see Section 8 and Section 13.*

## SECTION 7

### Handling & storage

#### 7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use.

#### 7.2 Conditions for safe storage, including any incompatibilities

**Storage temperature** Ambient

**Conditions for safe storage (incompatibilities)** Storage class (TRGS 510): 3: Flammable liquids

#### 7.3 Specific end use(s)

*See Section 1.2.*

## SECTION 8

**Exposure controls / personal protection****8.1 Control parameters**

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

**DNEC/PNEC data****DNEC**

Chronic effects systemic (Dermal): 1.7 mg/kg bw/day

Acute effects systemic (Inhalation): 1354.6 mg/m<sup>3</sup>

Chronic effects systemic (Inhalation): 64.3 mg/m<sup>3</sup>

**PNEC**

Fresh water: 1.34 µg/L

Fresh water sediment: 36.2 µg/kg sediment dw

Water Intermittent: 13.4 µg/L

Microorganisms in sewage treatment: 273 µg/L

Soil (Agriculture): 9.7 µg/kg soil dw

Marine water: 0.134 µg/L

Marine water sediment: 3.62 µg/kg sediment dw

**8.2 Exposure controls****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**

Gloves: Nitrile Rubber, 0.4mm (480 mins).

**Respiratory protection**

Self-contained breathing apparatus

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.

**Other protection**

*No data available*

**Environmental exposure controls**

*No data available*

## SECTION 9

**Physical & chemical properties****9.1 Information on basic physical and chemical properties****Appearance / physical state**

Liquid

DERIVED FROM: LITERATURE

**Colour**

Colourless

DERIVED FROM: LITERATURE

**Odour**

Aromatic

DERIVED FROM: LITERATURE

**Melting / freezing point**

-126°C

DERIVED FROM: LITERATURE

**Boiling point**

101°C

DERIVED FROM: LITERATURE

|                                                          |                                                                   |
|----------------------------------------------------------|-------------------------------------------------------------------|
| <b>Flammability</b>                                      | <i>Not applicable</i>                                             |
| <b>Lower and upper explosion limit</b>                   | 1.1-6.7%<br>DERIVED FROM: LITERATURE                              |
| <b>Flash point</b>                                       | -4 °C<br>DERIVED FROM: LITERATURE                                 |
| <b>Auto-ignition temperature</b>                         | 283.0°C<br>DERIVED FROM: LITERATURE                               |
| <b>Decomposition temperature</b>                         | <i>No data available</i>                                          |
| <b>pH</b>                                                | <i>Not applicable</i>                                             |
| <b>Acidity</b>                                           | Neutral<br>DERIVED FROM: LITERATURE                               |
| <b>Kinematic viscosity</b>                               | <i>Not applicable</i>                                             |
| <b>Solubility</b>                                        | Soluble in water: 0.014 g/l at 25 °C.<br>DERIVED FROM: LITERATURE |
| <b>Partition coefficient n-octanol/water (log value)</b> | 3.6<br>DERIVED FROM: LITERATURE                                   |
| <b>Vapour pressure</b>                                   | 61.8 hPa at 25 °C<br>DERIVED FROM: LITERATURE                     |
| <b>Density (g/mL)</b>                                    | 0.77 g/mL<br>DERIVED FROM: LITERATURE                             |
| <b>Relative vapour density</b>                           | 3.4<br>DERIVED FROM: LITERATURE                                   |
| <b>Particle characteristics</b>                          | <i>Not applicable</i>                                             |

## 9.2 Other information

*No data available*

## SECTION 10

### Stability & reactivity

#### 10.1 Reactivity

Vapours may form explosive mixture with air

#### 10.2 Chemical stability

Stable under the prescribed storage conditions

#### 10.3 Possibility of hazardous reactions

Risk of explosion with: Oxygen

Exothermic reaction with: Oxidizing agents and fire-promoting substances

#### 10.4 Conditions to avoid

Heat, sparks, flames.

#### 10.5 Incompatible materials

*No data available*

## 10.6 Hazardous decomposition products

See section 5

### SECTION 11

## Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity (LD50 / LC50)** LD50 Oral - Mouse - 2,250 mg/kg  
LC50 Inhalation - Rat - male - 4 h - > 52.6 mg/l - vapour  
LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg  
Ref: External SDS

**Skin corrosion / irritation** Causes skin irritation

**Eye corrosion / irritation** *Not applicable*

**Respiratory / skin sensitisation** *Not applicable*

**Carcinogenicity** *Not applicable*

**Mutagenicity** *Not applicable*

**Reproductive toxicity** *Not applicable*

**STOT (single / repeated exposure)** Causes drowsiness or dizziness

**Aspiration hazard** Yes

### 11.2 Information on other hazards

*Not applicable*

### SECTION 12

## Ecological information

### 12.1 Toxicity

semi-static test LC50 - Oryzias latipes - 2.07 mg/l - 96 h  
semi-static test EC50 - Daphnia magna (Water flea) - 0.326 mg/l - 48 h  
semi-static test EC50 - Daphnia magna (Water flea) - 0.326 mg/l - 48 h  
static test NOEC - Pseudokirchneriella subcapitata (algae) - 0.022 mg/l - 72 h  
static test NOEC - activated sludge - 2.725 mg/l - 14 d  
Ref: External SDS

### 12.2 Persistence and degradability

Not readily biodegradable

### 12.3 Bioaccumulative potential

*Not applicable*

### 12.4 Mobility in soil

*Not applicable*

## 12.5 Results of PBT and vPvB assessment

*Not applicable*

## 12.6 Endocrine disrupting properties

*See Section 11.2.*

## 12.7 Other adverse effects

*No data available*

## SECTION 13

### Disposal considerations

#### 13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

## SECTION 14

### Transport information

#### 14.1 UN number or ID number

UN2296

#### 14.2 UN proper shipping name

METHYLCYCLOHEXANE

#### 14.3 Transport hazard class(es)

3



#### 14.4 Packing group

II

#### 14.5 Environmental hazards

Marine pollutant

#### 14.6 Special precautions for user

**Special precautions for user** Handle in accordance with good industrial hygiene and safety practice

**Transport category** 2

**Tunnel code** (D/E)

**Packing instruction (ADR)** P001

**Packing instruction (IMDG)** P001

#### 14.7 Maritime transport in bulk according to IMO instruments

*No data available*

## SECTION 15

### Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

##### Substance-specific regulations (e.g. licences)

National Regulations:

-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations, limitations and legal regulations:

-Directive 94/33/EC- The protection of young people at work.

##### REACH code

Y110

##### ECHA notification

*Not applicable*

#### 15.2 Chemical safety assessment

*Not applicable*

## SECTION 16

### Other information

##### Revision notes / other information

Replaces ver. 1.1, published 20th August 2025

Full List of H-Statements:

H225 Highly Flammable liquid and vapor

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H336 May cause drowsiness or dizziness

H410 Very toxic to aquatic life with long lasting effects

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at [info@molekula.com](mailto:info@molekula.com).