



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Cyclopentane
 CAS No. 287-92-3
 EC No. 206-016-6
 REACH Registration No.

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

Identified Use(s) PC21 Laboratory Chemicals
 Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Company Identification Rathburn Chemicals Ltd
 Address of Manufacturer 6 Caberston Road
 Walkerburn
 Peeblesshire
 Scotland
 Postal code EH43 6AU
 Telephone: 00 (44) (0) 1 896 870 651
 E-mail sales@rathburn.co.uk
 Office hours 09:00 – 17:00

Supplier

Company Identification Rathburn Chemicals Ltd
 Address of Supplier 6 Caberston Road
 Walkerburn
 Peeblesshire
 Scotland
 Postal code EH43 6AU
 Telephone: 00 (44) (0) 1 896 870 651
 E-mail sales@rathburn.co.uk
 Office hours 09:00 – 17:00

1.4 Emergency telephone number

Emergency Phone No. 00 (44) (0) 1 896 870 651 or 00 (44) (0) 7807 520501
 Contact Roddy Stoddart

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP) Aquatic Chronic 3 :Harmful to aquatic life with long lasting effects.
 Asp. Tox. 1 :May be fatal if swallowed and enters airways.
 Flam. Liq. 2 :Highly flammable liquid and vapour.
 STOT SE 3 :May cause drowsiness or dizziness.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name Cyclopentane

Hazard Pictogram(s)



GHS02



GHS08



GHS07

Signal Word(s) Danger

Hazard Statement(s)
 H225: Highly flammable liquid and vapour.
 H304: May be fatal if swallowed and enters airways.
 H336: May cause drowsiness or dizziness.
 H412: Harmful to aquatic life with long lasting effects.



Precautionary Statement(s) P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P331: Do NOT induce vomiting.
 P403+P233: Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
cyclopentane	287-92-3	206-016-6	100	Flam. Liq. 2 H225 Aquatic Chronic 3 H412	GHS02

3.2 Mixtures

Not applicable.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
 Skin Contact Take off immediately all contaminated clothing. Rinse skin with water.
 Eye Contact Treat symptomatically.
 Ingestion Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

Call a POISON CENTER/doctor if you feel unwell. Treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media Use to extinguish.
 Unsuitable extinguishing media Water jet spray

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. May decompose in a fire giving off toxic fumes.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up



Adsorb spillages onto sand, earth or any suitable adsorbent material. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

6.4 Reference to other sections

See Also Section 8, 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting/equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

7.3 Specific end use(s)

Not known.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

No Occupational Exposure Limit assigned.

8.2 Exposure controls

8.2.1. Appropriate engineering controls

Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Use with ventilation, local exhaust ventilation or breathing protection.

8.2.2. Personal protection equipment

Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection

A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards

None known.



8.2.3. Environmental Exposure Controls

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Liquid.

Colour : Colourless

Odour

Odour threshold

Not known.

pH

Not known.



Melting point/freezing point	-94C
Initial boiling point and boiling range	50C
Flash Point	-20C
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	2.42
Density (g/ml)	Not known.
Relative density	0.751 g/cm ³
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.
9.2 Other information	None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Avoid friction, sparks, or other means of ignition.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Low acute toxicity
Acute toxicity - Skin Contact	Low acute toxicity
Acute toxicity - Inhalation	Low acute toxicity
Skin corrosion/irritation	Non-irritant
Serious eye damage/irritation	Non-irritant
Skin sensitization data	Not classified
Respiratory sensitization data	Not classified
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	Not classified
Lactation	Not classified
STOT - single exposure	May cause drowsiness or dizziness.
STOT - repeated exposure	Not classified
Aspiration hazard	May be fatal if swallowed and enters airways.

11.2 Other information

Not known.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

	Harmful to aquatic life with long lasting effects.
Toxicity - Aquatic invertebrates	Not known.
Toxicity - Fish	H412: Harmful to aquatic life with long lasting effects.
Toxicity - Algae	Not known.
Toxicity - Sediment Compartment	Not classified.



Toxicity - Terrestrial Compartment	Not classified.
12.2 Persistence and Degradation	Not known.
12.3 Bioaccumulative potential	Not known.
12.4 Mobility in soil	Not known.
12.5 Results of PBT and vPvB assessment	Not known.
12.6 Other adverse effects	Not known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Do not allow to enter drains, sewers or watercourses. Do NOT landfill. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimor or incinerator. Dispose of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 1146

14.2 UN proper shipping name

UN proper shipping name CYCLOPENTANE

14.3 Transport hazard class(es)

ADR/RID Class	3
IMDG Class	3
IMDG EMS	F-E, S-D
ICAO/IATA	
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y344
Passenger and Cargo Aircraft Limited Quantities Max net Qty	10L
Passenger and Cargo Aircraft Packing Instructions	355
Passenger and Cargo Aircraft Max net Qty	60L
Cargo Aircraft Packing Instructions	366
Cargo Aircraft Max net Qty	220L
Special Provisions	
Emergency Response Guidebook (ERG) Code	3L
ADR Classification Code	F1
ADR HIN	33
ADR Transport Category	2
Tunnel Restriction Code	D/E
Emergency Action Code	3YE
APP Advice on Additional Personal Protection (APP)	
14.4 Packing group	
Packing group	II
Labels	3





Special Provisions

Limited Quantities	1 L
Excepted Quantities	E2
Mixed Packing Instructions for Packages	P001 IBC02 R001
Special Packing Provisions for Packages	
Mixed Packing Instructions for Packages	MP19

14.5 Environmental hazards

Environmental hazards Not classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Packing Instructions for Portable Tanks	T7
Special Provisions for Portable Tanks	TP1
Tank Code for Tanks	LGBF
Special Provisions for Tanks	
Vehicle for Tank Carriage	FL
Special Provisions for Carriage - Packages	
Special Provisions for Carriage - Bulk	
Special Provisions for Carriage - Loading, Unloading and Handling	
Special Provisions for Carriage - Operation	S2 S20

15. SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

REACH: ANNEX XIV list of substances subject to authorisation Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles cyclopentane (287-92-3)

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS02



GHS08



GHS07



Hazard Statement(s)	<p>H225: Highly flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H336: May cause drowsiness or dizziness. H412: Harmful to aquatic life with long lasting effects.</p>
Precautionary Statement(s)	<p>P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233: Keep container tightly closed. P240: Ground and bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting/equipment. P242: Use non-sparking tools. P243: Take action to prevent static discharges. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312: Call a POISON CENTER/doctor if you feel unwell. P331: Do NOT induce vomiting. P370+P378: In case of fire: Use to extinguish. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents in accordance with local, state or national legislation.</p>
Acronyms	<p>ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road CAS : Chemical Abstracts Service CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures DNEL : Derived No Effect Level EC : European Community EINECS : European Inventory of Existing Commercial Chemical Substances IATA : International Air Transport Association IBC : Intermediate Bulk Container ICAO : International Civil Aviation Organization IMDG : International Maritime Dangerous Goods LTEL : Long term exposure limit PBT : Persistent, Bioaccumulative and Toxic PNEC : Predicted No Effect Concentration REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals RID : Regulations concerning the International Carriage of Dangerous Goods by Rail STEL : Short term exposure limit STOT : Specific Target Organ Toxicity UN : United Nations vPvB : very Persistent and very Bioaccumulative</p>
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