

Safety Data Sheet
According to Regulation (EC) 1907/2006



1890 Cyclohexanone

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

Cyclohexanone

Synonym:

Ketohexamethylene, Pimelic Ketone

REACH Registration Number: 01-2119453616-35-XXXX

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: product.safety@panreac.com

1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

2. Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) nº 1272/2008.

Flam. Liq. 3

Acute Tox. 4

Hazard Pictograms



Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.
H332 Harmful if inhaled.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.
P242 Use only non-sparking tools.
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

Classification (67/548/CEE or 1999/45/CE).

Xn Harmful

R20
R10

For the full text of the R-phrases mentioned in this section, see section 16.

3. Component Composition/Information

Name: Cyclohexanone

Formula: $\text{CH}_2(\text{CH}_2)_4\text{CO}$ M.= 98,14 CAS [108-94-1]

EC number (EINECS): 203-631-1

EC index number: 606-010-00-7

REACH Registration Number: 01-2119453616-35-XXXX

4. First aid**4.1 General indications:**

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Take the person out into the fresh air. In the event of suffocation, proceed to provide artificial respiration.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open.

4.5 Swallowing:

Avoid vomiting. Risk of aspiration. Seek medical assistance. Laxatives: sodium sulphate (1 soup-spoonful in 250 ml of water). Administer Vaseline oil as a laxative (3 ml/kg).

5. Fire-fighting means**5.1 Suitable fire-extinguishing means:**

Foam. Dry powder.

5.2 Fire-fighting means which must NOT be used:

No specific data.

5.3 Special risks:

Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. May form explosive mixtures with the air. Prevent the build-up of static. In the event of fire, toxic fumes may form.

5.4 Protective equipment:

Suitable clothing and footwear.

6. Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

Do not inhale the fumes.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

7. Handling and storage

7.1 Handling:

Avoid the formation of electrostatic charges.

7.2 Storage:

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat. Dry atmosphere.

8. Staff exposure/protection controls

8.1 Technical protective measures:

Ensure good ventilation and renewal of the air in the premises.

8.2 Exposure limit control:

VLA-EC: 20 ppm - 82 mg/m³

VLA-ED: 10 ppm - 98 mg/m³ dermal resorption

8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter P. Filter A.

8.4 Hand protection:

Use suitable gloves neopren latex

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use suitable work clothing. Wash hands before breaks and when the job is done.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

9. Physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry: N/A

Odour: Characteristic.

pH:

N/A

Melting point/freezing point: -16,4 °C

Initial boiling point and boiling range: 155,6 °C

Flash point: 63 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: 8,3 %(V) / 1,2 %(V)

Vapour pressure: 4,7 hPa (20 °C)

Vapour density: N/A

Relative density: (20/4) 0,9478

Solubility: 150 g/l in water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature: 420 °C

Decomposition temperature: N/A

Viscosity: N/A

10. Stability and reactivity

10.1 Conditions which should be avoided:

The product is chemically stable under standar ambient conditions (room temperature).

10.2 Matter which should be avoided:

Nitric acid.

10.3 Hazardous decomposition products:

No specific data.

10.4 Complementary information:

The gases/fumes can form explosive mixtures with the air.

11. Toxicological information

11.1 Acute toxicity:

LD L0 oral rbt : 1.600 mg/kg

LD50 oral rat : 1.535 mg/kg

LD50 skn rbt : 948 mg/kg

TC L0 inh man : 75 ppm

LC L0 inh mus : 19200 mg/m3 1 ½ h

LD50 ipr mus : 1.230 mg/kg

11.2 Dangerous effects for health:

If fumes inhaled: Irritations to the respiratory tracts. Through contact with the eyes: irritations Risk of sight disorders If it is absorbed in large quantities: effects on the central nervous system narcosis headaches saliva flow nausea vomiting vertigo coma Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

12. Environmental information

12.1 Toxicity:

12.1.1 - EC50 test (mg/l):

Bacteria (Photobacterium phosphoreum) 21,3 mg/l

Classification:

Extr. toxic

Fish

Classification: Highly toxic

12.1.2. - Receptor medium:

Risk for the water environment

High

Risk for the land environment

Medium

12.1.3. - Observations:

Extremely toxic in water environments.

12.2 Persistence and Degradability :

12.2.1 - Test:

12.2.2. - Biotic degradation classification:

BOD5/COD

Biodegradability

12.2.3. - Abiotic degradation depending on pH:

12.2.4. - Observations:

Data not available.

12.3 Bioaccumulative potential:

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

Data not available.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other possible effects on the environment:

Do not allow it to enter soils or water channels.

13. Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

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13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

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14. Information concerning transport

Overland (ADR):

Technical name: CYCLOHEXANONE

UN 1915 Class: 3 Packaging group: III (D/E)

By sea (IMDG):

Technical name: CYCLOHEXANONE

UN 1915 Class: 3 Packaging group: III

By air (ICAI-IATA):

Technical name: Cyclohexanone

UN 1915 Class: 3 Packaging group: III

Packaging instructions: CAO 366 PAX 355

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. Other information

Other precautionary statements

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P370+P378 In case of fire: Use for extinction.

P403+P235 Store in a well-ventilated place. Keep cool.

Labelling (65/548/CEE or 1999/45/CE)

R-phrase(s): **R20** Harmful by inhalation.
 R10 Flammable.

S-phrase(s): **S25** Avoid contact with eyes.

Review number and date: 4 17.6.2011

Date published: 17.6.2011

In respect of the previous review, changes have been made to the following sections: 1

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.