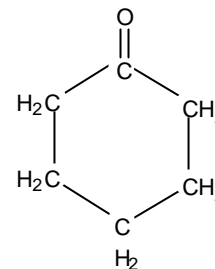


Cyclohexanone



Formula

C₆H₁₀O
Molecular weight : 98.14

Appearance

Clear, water-white liquid with a characteristic peppermint-like odour

Physical properties

Specific gravity at 20° / 4 ° C	0.944 - 0.946
Viscosity at 20° C	2.2 mPa.s
at 25° C	2.0 mPa.s
Solidification point	- 31° C
Boiling point at 1013 mbar	155.7° C
Flash point, Abel Pensky	43.5° C (closed cup) 53.9° C (open cup)
Auto ignition temperature	430° C
Explosive limits	1.1-9.4 vol % in air at 100° C
Solubility in water at 20° C	9.5 grams in 100 grams of water
Heat of vaporization at 29° C	109 cal/g (457 joule-g)
Distillation range (ASTM)	1-96 ml within 1.8° range
25	incl. 155.65°C
Refractive index N	1.4480 - 1.4490
D	

Specification

Cyclohexanone	min. 99.8 % by mass	ANON-0275-SU ANON-0632-SU ANON-0406-SU ANON-1797-SU
Cyclohexanol	max. 0.1 % by mass	ANON-0632-SU
Water	max. 0.05 % by mass	ANON-1797-SU
Colour APHA	max. 10	ANON-1879-SU
Non-volatile matter	max. 0.02 % by mass	ANON-1826-SU
Ash	max. 0.001 % by mass	ANON-1825-SU

Applications

Chemical

Cyclohexanone is used to manufacture:

caprolactam, adipic acid, orthophenylphenol, E-caprolactone, cyclohexanone peroxide, cyclohexanone formaldehyde resins, intermediates for pesticides and pharmaceuticals

Solvent

Cyclohexanone is used in a variety of applications such as:

- Formulation of pesticides
- Production of magnetic tapes (audio/video/computers)
- In the plastic industry (PVC and polymers of methacrylate esters)
- In the paint, varnish and lacquer industry (e.g. nitrocellulose, thinners)
- In the leather industry (as degreasing agent, dye carrier and in coatings)
- In the metallurgical industry (as degreasing and as cleaning agent)

DSM Fibre Intermediates

Product Data Sheet

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Freight classification	IMO UN number ADR/VLG CAS number	3.3 19.15 3,31 C 108-94-1
Packing	New steel drums Road tank cars Rail tank wagons Tank containers Tank vessels	
Safety precautions	Cyclohexanone is irritating to eyes, nose and throat. Prolonged skin contact of the liquid causes irritation and defatting of the skin. Cyclohexanone is an imflammable liquid, vapours can form explosive mixtures with air. When handling cyclohexanone, adequate ventilation and the use of protective gloves (not PVC) and goggles are recommended. Store cyclohexanone in tightly closed and earthed containers in a cool well ventilated area away from ignition sources (vapour density relative to air: 3.4 times as heavy at 20° C approx.) and strong oxidizing agents. Fires should be extinguished by carbon dioxide or chemical powders.	
Sales	CPH Chemicals BV Amsterdamseweg 204A 1182 HL Amstelveen The Netherlands Phone: +31 20 426 09 00 Fax: +31 20 426 09 01	

The information in this leaflet, is to the best of our knowledge, true and accurate. Any recommendation or suggestions are made without warranty of guarantee since the conditions of use are beyond our control. We further point out that patents may exist for certain applications.

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