



Material Safety Data Sheet

1. Identification of Substances/Preparation and of the Company/undertaking.

- **Product details**
- **Trade name:** cyclohexanone
- **Manufacturer/Supplier:**
Jay Overseas Pvt.Ltd.
402, Shopper Plaza-IV,
Opp.Lal Bunglow,
C.G.Road,Navrangpura,
Ahmedabad-380 009
Ph:+91 79-66622278 to 92 Fax:+91 79-66622280 /90
E-Mail Id: info@jayoverseas.com
- **Further information obtainable from:** Product safety department.

2. Composition/Information on ingredients.

- **Chemical characterization:**
- **CAS No. Description**
108-94-1 cyclohexanone
- **Identification number(s)**
- **EINECS Number:** 203-631-1
- **EU Number:** 606-010-00-7

3. Hazards Identification.

- **Hazard description:**



Xn Harmful

- **Information concerning particular hazards for human and environment:**
R 10 Flammable.
R 20 Harmful by inhalation.

4. First Aid Measures.

- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

5. Fire-Fighting Measures.

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** Mouth respiratory protective device.

6. Accident Release Measures.

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7. Handling & Storage.

- **Handling:**
 - **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
 - **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** Keep container tightly sealed.

8. Exposure Control/Personal Protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**
108-94-1 cyclohexanone

PEL (USA) -----	200 mg/m ³ , 50 ppm
REL (USA)-----	100 mg/m ³ , 25 ppm
	Skin
TLV (USA)-----	50 mg/m ³ , 20 ppm
	Skin
TLV (EU)-----	Short-term value: 81.6 mg/m ³ , 20 ppm
	Long-term value: 40.8 mg/m ³ , 10 ppm
	Skin
WEL (Great Britain)-----	Short-term value: 20 ppm
	Long-term value: 10 ppm
- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
 - **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
 - **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 - **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
 - **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
 - **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - **Eye protection:**



Tightly sealed goggles

9. Physical and Chemical Properties.

· General Information

Form: Fluid

Colour: Colourless

Odour: Characteristic

· Change in condition

Melting point/Melting range: ca. - 26°C

Boiling point/Boiling range: 153 - 156°C

· Flash point: 43°C

· Ignition temperature: 420°C

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:

Lower: 1.3 Vol %

Upper: 9.4 Vol %

· Vapour pressure at 20°C: 5 hPa

· Density at 20°C: 0.95 g/cm³

· Solubility in / Miscibility with

water at 20°C: 80 g/l

10. Stability and Reactivity.

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Dangerous reactions No dangerous reactions known.

· Dangerous decomposition products: No dangerous decomposition products known.

11. Toxicological Information.

· Acute toxicity:

· LD/LC50 values relevant for classification:

Oral----- LD50----- 1535 mg/kg (rat)

Dermal----- LD50----- 948 mg/kg (rabbit)

Inhalative ----- LC50/4 h ----- 8000 mg/l (rat)

· Primary irritant effect:

· on the skin: No irritant effect.

· on the eye: No irritating effect.

· Sensitization: No sensitizing effects known.

12. Ecological Information.

· General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. Disposal Consideration.

· Product:

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

· **Recommendation:** Disposal must be made according to official regulations.

14. Transport Information.

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 30
- **UN-Number:** 1915
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1915 CYCLOHEXANONE
- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1915
- **Label 3**
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Proper shipping name:** CYCLOHEXANONE
- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1915
- **Label 3**
- **Packaging group:** III
- **Proper shipping name:** CYCLOHEXANONE

15. Regularity Information.

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Xn Harmful

· **Risk phrases:**

10 Flammable.

20 Harmful by inhalation.

· **Safety phrases:**

2 Keep out of the reach of children.

25 Avoid contact with eyes.

16. Other Information.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.