



Sunita Commercials Pvt. Ltd.

## **Material Safety Data Sheet** **Cyclohexanone MSDS**

### **1. 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

### **2. Hazards Identification.**

- **Hazard description:**



Xn Harmful

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

### **3. 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.

### **4. Fire-Fighting Measures.**

- **Suitable extinguishing agents:**

CO<sub>2</sub>, 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.

### **5. 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).  
Ensure adequate ventilation.

### **6. 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.

### **7. Exposure Control/Personal Protection**

- **Ingredients with limit values that require monitoring at the workplace:**

#### **108-94-1 cyclohexanone**

PEL (USA) -----200 mg/m<sup>3</sup>, 50 ppm

REL (USA)----- 100 mg/m<sup>3</sup>, 25 ppm

Skin

TLV (USA)----- 50 mg/m<sup>3</sup>, 20 ppm

Skin

TLV (EU)----- Short-term value: 81.6 mg/m<sup>3</sup>, 20 ppm

Long-term value: 40.8 mg/m<sup>3</sup>, 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

### **8. 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/cm<sup>3</sup>

**· Solubility in / Miscibility with**

**water at 20°C:** 80 g/l

### **9. 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.

### **10. 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.

### **11. 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.

### **12. Disposal Consideration.**

**· Product:**

**· Recommendation**

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

**· Uncleaned packaging:**