

Safety Data Sheet

Cyclohexanone

SECTION I - IDENTIFICATION



Transchem, Inc.
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Carlsbad, CA 92011
(800) 783-2436
Chemtel Emergency Response :. (800) 255-3924

PRODUCT NUMBER: CYC
PRODUCT NAME: Cyclohexanone
CHEMICAL FAMILY:
CAS NUMBER: 108-94-1
DATE PREPARED: 11/4/1994
REVISION NUMBER: 5/28/2014

SECTION II - HAZARDOUS IDENTIFICATION

GHS CLASSIFICATION:

Classification

| | |
|-----------------------------------|-------------|
| Flammable Liquids | Category 2 |
| Acute Toxicity, Oral | Category 4 |
| Skin Corrosion/Irritation | Category 3 |
| Serious Eye Damage/Eye Irritation | Category 2B |

DANGER!

GHS LABEL:



Hazard Statements

| | |
|------|--------------------------------|
| H225 | Highly flammable gas and vapor |
| H302 | Harmful if swallowed |
| H316 | Causes mild skin irritation |
| H320 | Causes eye irritation |

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Precautionary Statements

- P210 Keep away from heat/sparks/open flames/hot surface - No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/light/equipment, etc.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.
- P330 Rinse mouth.
- P332+313 If skin irritation occurs: get medical advice/attention.
- P337+313 If eye irritation persists get medical advice/attention.
- P370+378 In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction.
- P403+235 Store in a well ventilated place. Keep cool.
- P501 Dispose of contents/container to an approved waste disposal plant.

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

| Component Name | CAS # | Component% | OSHA PEL | ACGIH TLV |
|----------------|----------|------------|----------|--------------|
| Cyclohexanone | 108-94-1 | 100% | 50ppm | 20 ppm (TWA) |

SECTION IV - FIRST AID MEASURES

Contact with eyes: Flush with water for 15 minutes. Seek immediate medical attention.

Skin contact: Wash exposed areas with water and mild soap. Remove contaminated clothing immediately and launder before reuse. If irritations persist, seek immediate medical attention.

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Inhalation: Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Seek immediate medical attention.

Ingestion: If swallowed. Do not induce vomiting. Seek immediate medical attention.

SECTION V - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water fog, foam, CO₂, dry chemical.

Special Fire Fighting Procedures Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling.

Unusual Fire Fighting Hazards: Product is flammable and may be ignited by heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights or mechanical/electrical equipment). Vapors are heavier than air and may accumulate in low areas. Vapors may travel considerable distances to a source of ignition where they can ignite, flashback or explode. May create vapor/air explosion hazard indoors, outdoors or in sewers. If container is not properly cooled, it can explode in the heat of a fire.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Keep all sources of ignition and hot metal surfaces away from spill or release.
Evacuate all unprotected personnel from the area.

Environmental Precautions: Prevent liquid from entering drains, sewers, waterways, ground and surface water or soil.
Contain spill if it can be done with minimal risk.
Notify proper authorities. Reportable quantity is 5000 pounds or 634 gallons.

Methods for Cleaning Up: Use foam on spills to minimize vapors.
Using only non-sparking tools and explosion proof equipment, collect spill on absorbent material and put into approved container.

SECTION VII - HANDLING AND STORAGE

Handling and Storage:

- Vent container carefully before opening.
- Bond and ground all equipment when transferring from one vessel to another. The use of explosion-proof equipment is recommended.
- "Empty" containers retain residue and/or vapor and may be dangerous. Do not cut, weld, braze solder, drill, grind or expose such containers to heat, flames, sparks, or other ignition sources.
- Keep containers tightly closed when not in use.
- Avoid prolonged breathing of mist or vapor. Wash thoroughly after handling.
- NFPA Class II storage.

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SECTION VIII - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

| Component Name | CAS # | OSHA PEL | ACGIH TLV |
|----------------|----------|----------|--------------|
| Cyclohexanone | 108-94-1 | 50ppm | 20 ppm (TWA) |

Engineering Controls: Adequate local or mechanical ventilation to reduce vapor or mist to below the PEL or TLV.

Monitoring: Follow accepted work practices for handling a flammable material.
Do not eat, drink or smoke in areas where this chemical is used or stored.
Have eye wash stations and safety showers readily available.

Personal Protective Equipment (PPE)

Eye Protection: Goggles or approved OSHA device with side shields; do not wear contact lenses when handling this product.

Skin Protection: Impervious solvent resistant gloves.
Impervious apron and work boots recommend where splashing may occur.

Respiratory Protection: Use the proper respirator in areas where the chemical exposure is unknown or above the OSHA PEL or ACGIH TLV.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------|---------------------------|
| Appearance | Clear, Colorless Liquid |
| Odor | Camphor-Like Solvent Odor |
| pH@25°C | - |
| Melting/Freezing Point | - |
| Flashpoint | 111°F (43.9°C), TCC |
| Specific Gravity | 0.946 -0.949 |
| Solubility | Negligible |
| Auto-Ignition Temperature | - |
| Decomposition Temperature | - |
| VOC Content | 100% (7.88/gal) |
| Odor Threshold | - |
| Boiling Range | 313°F |
| Evaporation Point | 0.38 (Butyl Acetate=1) |
| Flammable Limits - Upper | 9.4% |
| Flammable Limits - Lower | 1.1% |
| Vapor Pressure | 5 mmHg @ 25°C |
| Vapor Density (Air=1) | 3.4 (Air=1) |
| Viscosity | - |

SECTION X - STABILITY AND REACTIVITY

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- Stability:** Stable
- Conditions to Avoid:** Extreme heat and ignition sources.
- Hazardous Decomposition/Byproducts:** CO, CO₂, and various hydrocarbons under combustion conditions.
- Hazardous Polymerization:** Will not occur.
- Polymerization Conditions to Avoid:** None

SECTION XI - TOXICOLOGICAL INFORMATION

- Likely Route of Exposure:** Contact and inhalation; ingestion possible.
- Inhalation:** May cause irritation to the upper respiratory tract and CNS depression.
- Eye Contact:** Causes eye irritation including stinging, watering and redness which may result in corneal injury.
- Skin Contact:** Contact may cause mild skin irritation including redness, burning and drying/cracking of the skin.
Repeated or prolonged contact with large amounts of this material may result in absorption through the skin to produce toxic effects.
- Ingestion:** Aspiration hazard. Can enter the lungs during swallowing or vomiting and cause chemical pneumonia and edema.

Toxicity:

| Component Name | LD50 | LC50 |
|----------------|--|-------------------------------------|
| Cyclohexanone | Oral - Rat - 1,534 mg/kg; Dermal - Rabbit - 794 - 3,160 | Inhalation - Rat - 4 h - > 6.2 mg/l |

| Reproductive Effects | Teratogenicity | Mutagenicity | Embryotoxicity | Sensitization to Product | Synergistic Products |
|----------------------|----------------|----------------|----------------|--------------------------|----------------------|
| Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

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SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicity: Information not available.

Mobility: Information not available.

Degradability: Information not available.

BioAccumulation: Information not available.

SECTION XIII - WASTE DISPOSAL CONSIDERATIONS

Follow Federal, state, and local regulations.

SECTION XIV - TRANSPORT INFORMATION

DOT SHIPPING INFORMATION

Proper Shipping Name: Cyclohexanone

Contains:

Hazard Class and Label: 3

Identification Number: UN 1915

Packaging Group: III

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:..... The components of this product are listed on the TSCA Inventory

SARA TITLE III SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE:

No chemicals in this material are subject to the reporting requirements.

SARA TITLE III SECTION 311/312 HAZARD CATEGORIZATION:

| Acute | Chronic | Fire | Pressure | Reactive |
|-------|---------|------|----------|----------|
| X | X | X | | |

SARA TITLE III SECTION 313 SUPPLIER INFORMATION:

No chemicals in this material are subject to the reporting requirements.

CERCLA SECTION 102(a) HAZARDOUS SUBSTANCE:

| Component Name | CAS # | % by wt. | RQ (lbs.) |
|----------------|----------|----------|-----------|
| Cyclohexanone | 108-94-1 | 100% | 5,000 |

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SECTION XVI - OTHER INFORMATION

HMIS Health: 2

HMIS Flammability: 2

HMIS Reactivity: 0

Additional:

Specification Information

Department issuing data sheet: Compliance

Email address: compliance@transcheminc.com

Training necessary: Follow all Federal, State and local regulations.

Disclaimer:

Seller and manufacturer disclaim any implied or expressed warranties, including warranties of merchantability or fitness of this product for any particular purpose. In no event shall seller be liable for any claim for incidental or consequential damages arising out of or in connection with the sale, delivery, transportation or use of this product. Seller's and manufacturer's liability in all events is limited to, and shall not exceed the purchase price paid for this product.