



# Qualikems Lifesciences Pvt. Ltd

(Formerly known as Qualikems fine chem Pvt Ltd)

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Material Safety Data Sheet

Cyclohexanol

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Cyclohexanol

**Synonyms:** Adronal; Cyclohexyl alcohol; Hexalin; Hexahydrophenol; Hydroxycyclohexane.

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
108-93-0	Cyclohexanol	100	203-630-6

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Appearance: colorless or slight yellow liquid. Flash Point: 67 deg C.

**Caution! Combustible liquid and vapor.** May be harmful if swallowed or absorbed through the skin. May cause eye and skin irritation. May cause respiratory tract irritation. May cause central nervous system depression. Hygroscopic (absorbs moisture from the air).

**Target Organs:** Central nervous system, eyes, skin, mucous membranes.

### Potential Health Effects

**Eye:** Contact with eyes may cause severe irritation, and possible eye burns. May cause chemical conjunctivitis and corneal damage.

**Skin:** Causes skin irritation. May cause irritation and dermatitis. May cause cyanosis of the extremities.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

**Inhalation:** Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. Inhalation at high concentrations may cause CNS depression and asphyxiation.

**Chronic:** Prolonged or repeated skin contact may cause defatting and dermatitis. Effects may be delayed. Prolonged exposure may cause non-specific nervous system effects.

#### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

**Notes to Physician:** Treat symptomatically and supportively.

#### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Containers may explode in the heat of a fire. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

**Flash Point:** 67 deg C ( 152.60 deg F)

**Autoignition Temperature:** 300 deg C ( 572.00 deg F)

**Explosion Limits, Lower:**Not available.

**Upper:** N/A

**NFPA Rating:** (estimated) Health: 1; Flammability: 2; Instability: 0

#### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Do not flush into a sewer. Clean up spills immediately, observing precautions in the Protective Equipment section. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep containers tightly closed.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Cyclohexanol	50 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route	50 ppm TWA; 200 mg/m <sup>3</sup> TWA 400 ppm IDLH	50 ppm TWA; 200 mg/m <sup>3</sup> TWA

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** colorless or slight yellow

**Odor:** camphor or menthol odor.

**pH:** Not available.

**Vapor Pressure:** 80 mm Hg @ 25 deg C

**Vapor Density:** 3.5 (Air=1)

**Evaporation Rate:**0.08 (n-butyl acetate=1)

**Viscosity:** 4.6 mPa @ 25 deg C

**Boiling Point:** 161 deg C @ 760mm Hg

**Freezing/Melting Point:**23 deg C

**Decomposition Temperature:**Not available.

**Solubility:** 3.6g/100ml (20°C)

**Specific Gravity/Density:**.96g/cm<sup>3</sup>

**Molecular Formula:**C<sub>6</sub>H<sub>12</sub>O

**Molecular Weight:**100.16

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, moisture, excess heat.

**Incompatibilities with Other Materials:** Oxidizing agents

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, toxic gases.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 108-93-0: GV7875000

**LD50/LC50:**

CAS# 108-93-0:

Draize test, rabbit, eye: 100 uL/24H Moderate;

Draize test, rabbit, eye: 100 uL/24H Mild;

Draize test, rabbit, eye: 10 uL Moderate;

Draize test, rabbit, skin: 500 uL/24H Moderate;

Draize test, rabbit, skin: 500 uL/24H Mild;

Oral, rat: LD50 = 1400 mg/kg;

**Carcinogenicity:**

CAS# 108-93-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** See actual entry in RTECS for complete information.

**Mutagenicity:** See actual entry in RTECS for complete information.

**Neurotoxicity:** No information found

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.

**Environmental:** Will not bioconcentrate, highly mobile in soil.

**Physical:** No information available.

**Other:** For more information, see "HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA."

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

#### Section 14 - Transport Information

	<b>IATA</b>	
<b>Shipping Name:</b>	Please contact for shipping information	
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

#### Section 15 - Regulatory Information

**Hazard Symbols:**

XN

**Risk Phrases:**

R 20/22 Harmful by inhalation and if swallowed.

R 37/38 Irritating to respiratory system and skin.

**Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

#### Section 16 - Additional Information

**MSDS Creation Date:** 12/12/1997

**Revision #5 Date:** 10/03/2005

**Revision #6 Date:** 09/03/2010

**Revision #7 Date:** 08/03/2015

**Revision #8 Date:** 07/03/2020

**Revision #9 Date:** 06/03/2025

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