



Material Safety Data Sheet

Cyclohexanol

MSDS# 00499

Section 1 - Chemical Product and Company Identification

MSDS Name: Cyclohexanol

Catalog Numbers: AC147680000, AC147680010, AC147680025, AC147680050, AC147680200, AC147685000

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

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

Company Identification: (USA) Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

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CAS#: 108-93-0  
Chemical Name: Cyclohexanol  
%: 98  
EINECS#: 203-630-6  
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Hazard Symbols: XN



Risk Phrases: 20/22 37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Combustible liquid and vapor. Hygroscopic (absorbs moisture from the air). Harmful if inhaled or swallowed. Causes eye, skin, and respiratory tract irritation. Target Organs: Blood, kidneys, central nervous system, liver, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation: Harmful if inhaled. Causes respiratory tract irritation.

Chronic: May cause liver and kidney damage. Adverse reproductive effects have been reported in animals. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause blood effects. Exposure to high concentrations may cause central nervous system depression.

#### 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. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:**

#### 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. Will burn if involved in a fire. Containers may explode in the heat of a fire. Combustible liquid and vapor.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

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

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

**Explosion Limits:** 1.2 vol %  
**Lower:**

**Explosion Limits:** Not available  
**Upper:**

**NFPA Rating:** health: 2; flammability: 2; instability: 1;

#### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

#### Section 7 - Handling and Storage

**Handling:** Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container.

#### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Cyclohexanol	50 ppm; Skin - potential significant contribution to overall exposure by the cutaneous route	50 ppm TWA; 200 mg/m3 TWA 400 ppm IDLH	50 ppm TWA; 200 mg/m3 TWA

OSHA Vacated PELs: Cyclohexanol: 50 ppm TWA; 200 mg/m3 TWA

**Engineering Controls:**

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**Exposure Limits**

## Personal Protective Equipment

- Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- Skin: Wear appropriate protective gloves to prevent skin exposure.
- Clothing: Wear appropriate protective clothing to prevent skin exposure.
- Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

Physical State: Physical State:

Color: after melting, clear colorless

Odor: camphor

pH: 6.5 (40 g/L aq.sol.(20°C))

Vapor Pressure: 1.3 mbar @ 20 deg C

Vapor Density: 3.46 (air=1)

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

Viscosity: Not available

Boiling Point: 161 deg C @ 760 mmHg ( 321.80°F)

Freezing/Melting Point: 23 deg C ( 73.40°F)

Decomposition Temperature: Not available

Solubility in water: 3.6 g/100mL (20°C)

Specific Gravity/Density: 0.960

Molecular Formula: C6H12O

Molecular Weight: 100.16

## Section 10 - Stability and Reactivity

- Chemical Stability: Hygroscopic: absorbs moisture or water from the air.
- Conditions to Avoid: Incompatible materials, ignition sources, excess heat, exposure to moist air or water.
- Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases, isocyanates, aliphatic amines.
- Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
- Hazardous Polymerization: Will not occur.

## Section 11 - Toxicological Information

- RTECS#: CAS# 108-93-0: GV7875000
- RTECS:  
CAS# 108-93-0: Draize test, rabbit, eye: 100 uL/24H Moderate;  
Draize test, rabbit, eye: 100 uL/24H Mild;
- LD50/LC50: 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: Cyclohexanol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
- Other: See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

- Other: Do not empty into drains.

## Section 13 - Disposal Considerations

- Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

US DOT

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:  
Canada TDG  
Shipping Name: Not regulated as a hazardous material  
Hazard Class:  
UN Number:  
Packing Group:

## Section 15 - Regulatory Information

### European/International Regulations

#### European Labeling in Accordance with EC Directives

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.

#### WGK (Water Danger/Protection)

CAS# 108-93-0: 1

#### Canada

CAS# 108-93-0 is listed on Canada's DSL List

Canadian WHMIS Classifications: B3, D1B, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 108-93-0 is listed on Canada's Ingredient Disclosure List

#### US Federal

##### TSCA

CAS# 108-93-0 is listed on the TSCA  
Inventory.

## Section 16 - Other Information

MSDS Creation Date: 12/19/1997

Revision #12 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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