Material Safety Data Sheet

City University of Hong Kong

MSDS CYCLOHEXANOL 0024

PRODUCT INFORMATION

Chemical Name: Cyclohexanol
Chinese Name: 環己醇
Synonyms: Cyclohexanol
Chemical Family: Alcyclic Alcohols
Formula: C₆H₁₁OH
C.A.S.: 108-93-0

RISK SYMBOL

PHYSICAL DATA

Physical State: Liquid
Boiling Point: 322 deg. F
Vapour Pressure, mmHg/20 deg. C: 1

The above information is believed to be accurate to the best of our knowledge. No responsibilities or liabilities are assumed or implied by CITY U for their inaccuracies.
Melting Point : 75 deg. F                          Vapour Density (Air=1): 3.5
Specific Gravity (Water=1): 0.95                  Water Solubility, %: 3.6
Appearance And Odour:                           Evaporation Rate (Butyl Acetate=1): <1
Clear Colourless Liquid; Solid Below 70 deg. F   Aromatic Camphor-Like Odour

FIRE AND EXPLOSION DATA

Condition Of Flammability: Flammable
Extinguishing Media: Use water spray, dry chemical, CO₂, or alcohol foam. do not use a direct water stream.
Flash Point : 151 deg. F
Flammable Limits In Air, %  Lower: 1.25  Upper: 12.25
Special Fire Fighting Procedures:
Fire fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool nearby containers and structures exposed to fire.

Unusual Fire And Explosion Hazards:
Extinguish all nearby sources of ignition. Vapour is heavier than air and may travel to other ignition sources.

REACTIVITY DATA

Stability: Stable
Polymerization: Will not occur
Incompatibility: Acids, oxidizing materials, and especially nitric acid.
Hazardous Decomposition Products: May liberate carbon monoxide or carbon dioxide.
Conditions To Avoid: Heat, sparks, and open flames.

HEALTH HAZARD DATA

Primary Routes Of Exposure: Inhalation, skin or eye contact, and swallowing
Signs And Symptoms Of Exposure:
Inhalation:
Vapours and mists irritate the nose, throat, and respiratory tract. Inhalation of higher concentrations may cause headaches, nausea, vomiting, coma, and intestinal disturbances. Inhalation of very high concentrations or prolonged exposure may cause unconsciousness or death.

Eye Contact: Vapours will irritate the eyes. Liquid and mists may severely irritate or damage the eyes.
Skin Contact:
Brief contact may dry the skin. Prolonged or repeated contact may irritate the skin, causing dermatitis. May be absorbed through the skin causing systemic effects similar to inhalation.

Swallowed: Depressant for CNS. May cause reversible or irreversible changes to exposed tissue.
Chronic Effects Of Exposure: None reported for humans. Liver and kidney damage in animal tests.

Medical Conditions Generally Aggravated By Exposure: None reported.
Oral: Rat LD_{50}=2060 mg/kg
Dermal: Rabbit LD_{50}=12 g/kg
Inhalation: Human TCLO=75 ppm
Carcinogenicity:
This material is not considered to be a carcinogen by the national toxicology program, the international agency for research on cancer, or the occupational safety and health administration.

Other Data:
A limited foreign epidemiological study showed non-specific disturbances of the autonomic nervous system. These effects have not been observed elsewhere. This product increased the mortality of offspring when pregnant mice were exposed to 1% concentrations.

FIRST AID MEASURES

If Inhaled:
Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention.

In Case Of Eye Contact:
Immediately flush eyes with lots of running water for 15 minutes, lifting the upper and lower eyelids occasionally. Get immediate medical attention.

In Case Of Skin Contact:
Immediately wash skin with lots of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

If Swallowed:
If conscious, immediately induce vomiting by giving 2 glasses of water and sticking a finger down the throat. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.
PREVENTATIVE MEASURES

Ventilation:
Local mechanical exhaust ventilation capable of maintaining emissions at the point of use below the pel.

Respiratory Protection:
If use conditions generate vapours or mists, wear a NIOSH-approved respirator appropriate for those emission levels. Appropriate respirators may be a full facepiece air-purifying cartridge respirator equipped for organic vapours/mists, a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator.

Eye Protection:
Chemical goggles unless a full facepiece respirator is also worn. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury.

Protective Clothing: Long-sleeved shirt, trousers, safety shoes, neoprene gloves, and neoprene apron.
Other Protective Measures: An eyewash and safety shower should be nearby and ready for use.

Storage And Handling Precautions:
Store in a cool, dry, well-ventilated place away from incompatible materials. Vent container carefully, as needed, to relieve pressure. keep container tightly closed when not in use. Do not use pressure to empty container. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing.

Repair And Maintenance Precautions: Do not cut, grind, weld, or drill on or near this container.

Other Precautions:
Vapours of this product are heavier than air and will collect in low places, such as pits or degreasers, or other poorly ventilated areas. Do not enter places where vapours are suspected unless special respiratory protection is worn and an observer is present. Containers, even those that have been emptied, will retain product residue and vapours. Always obey hazard warnings and handle empty containers as if they were full.

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ENVIRONMENTAL PROTECTION DATA

Action To Take For Spills Or Leaks:
Wear protective equipment including neoprene boots, neoprene gloves, neoprene apron, and a self-contained breathing apparatus in the pressure demand mode or a supplied-air respirator. If the spill or leak is small, a full facepiece air-purifying cartridge respirator equipped for organic vapours may be satisfactory. In any event, always wear eye protection. Extinguish all ignition sources. For small spills or drips, mop or wipe up and dispose of in dot-approved waste containers. For large spills, contain by diking with soil or other non-combustible sorbent material and then pump into DOT-approved waste containers; or absorb with non-combustible sorbent material and place residue in DOT-approved waste containers. Keep out of sewers, storm drains, surface waters, and soil.