

MATERIAL SAFETY DATA SHEET

Cyclopentanol, 99%

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Cyclopentanol, 99%

Company Identification: Alkali Metals Ltd.,
Plot B-5, Block III, IDA Uppal, Hyderabad
Tel :- 0091 40 27563002 / 27562932/ 27204441
Fax :- 0091 40 27562634 / 27201454
Email :- alkali@hd1.vsnl.net.in / amlnet@hd2.vsnl.net.in

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	%	EINECS#
96-41-3	Cyclopentanol	99	202-504-8

Risk Phrases: 10

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: clear colourless liquid.

Target Organs: None.

Potential Health Effects :

The toxicological properties of this material have not been investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.

SECTION 4 - FIRST AID MEASURES

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

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
Remove contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. Do NOT induce vomiting. Allow the victim to rinse his mouth and then to drink 2-4 cupfuls of water, and seek medical advice.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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. Flammable Liquid.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use agent most appropriate to extinguish fire.

Auto ignition Temperature: 375 deg C (707.00 deg F)

Flash Point: 51 deg C (123.80 deg F)

NFPA Rating: health-0; flammability-2; reactivity-0

Explosion Limits : Lower: Not available ; Upper: Not available.

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., dry sand or earth), then place into a chemical waste container. Clean up spills immediately, observing precautions in the Protective Equipment section.

SECTION 7 - HANDLING and STORAGE

Handling: Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.

Avoid contact with heat, sparks and flame. 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.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA-Final PELs
Cyclopentanol, 99%	None listed	None listed	None listed

OSHA Vacated PELs: Cyclopentanol, 99%:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical goggles. Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure. Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Wear a NIOSH/MSHA-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Not available.

Appearance : Not available.

Odor : None reported.

PH : Not available.

Vapor Pressure : 1.3 mbar @ 20 C

Vapor Density : Not available.

Evaporation Rate : Not available.

Viscosity : Not available.

Boiling Point : 139.0 - 140.0 deg C @ 760.00m

Freezing/Melting Point : - 19.00 -- 0.00 deg

Decomposition Temperature : Not available.

Solubility : soluble in alcohol

Specific Gravity/Density : 0.9490g/cm3

Molecular Formula : C5H10O

Molecular Weight : 86.13

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents - acid chlorides - acid anhydrides.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide. Hazardous Polymerization: Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS# : CAS# 96-41-3 unlisted.

LD50/LC50: Not available.

Carcinogenicity: Cyclopentanol, 99% - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity : Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

RCRA D-Series Maximum Concentration of Contaminants: None listed.

RCRA D-Series Chronic Toxicity Reference Levels: None listed.

RCRA F-Series: None listed.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Not listed as a material banned from land disposal according to RCRA.

SECTION 14 - TRANSPORT INFORMATION

US DOT Shipping Name: CYCLOPENTANOL

Hazard Class: 3

UN Number: 2244

Packing Group: III

IMO Shipping Name: CYCLOPENTANOL

Hazard Class: 3.3

UN Number: 2244

Packing Group: III

IATA Shipping Name: CYCLOPENTANOL

Hazard Class: 3

UN Number: 2244

Packing Group: III

RID/ADR Shipping Name: CYCLOPENTANOL

Dangerous Goods Code: 3(31C)

UN Number: 2244

Canadian TDG Shipping Name: CYCLOPENTANOL

Hazard Class: 3

UN Number: UN2244

Other Information: FLASHPOINT 51 C

SECTION 15 - REGULATORY INFORMATION

US FEDERAL

TSCA

CAS# 96-41-3 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ) None of the chemicals in this material have an RQ.

Section 302 (TPQ) None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.
Clean Air Act : This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Cyclopentanol, 99% can be found on the following state right to know lists: New Jersey.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases: R 10 Flammable.

Safety Phrases: S 16 Keep away from sources of ignition - No smoking.

WGK (Water Danger/Protection)

CAS# 96-41-3: 1

Canada

CAS# 96-41-3 is listed on Canada's DSL/NDSL List.

This product does not have a WHMIS classification.

CAS# 96-41-3 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 15/05/2000

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 way shall Alkali Metals Ltd. 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 Alkali Metals has been advised of the possibility of such damages.