



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No. CC 580  
Effective Date November 30, 1998

## SECTION V HEALTH HAZARD DATA

CC 580

### Threshold Limited Value

RTECS No. GU6300000 Toxicity data: Orl-rat LD50 29820 mg/kg. , ipr-mus LD50 1297 mg/kg. TWA: 300 ppm, 1030 mg/m<sup>3</sup> (ACGIH 1992-93).

### Effects of Overexposure

**EYES:** Can cause severe irritation, redness, tearing, blurred vision. **SKIN:** Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis. **INHALATION:** Can cause nasal and respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness, and even death. **INGESTION:** Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration into the lungs can cause chemical pneumonitis which can be fatal.

### Emergency and First Aid Procedures

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **INGESTION:** Aspiration hazard. If swallowed, do **NOT** induce vomiting. Give water to rinse mouth. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical help immediately. Never give anything by mouth to an unconscious person. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention.

## SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperature and sources of ignition.
	Stable		

Incompatibility (Materials to Avoid)	Strong oxidizing agents.
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Hazardous Decomposition Products	Carbon dioxide and carbon monoxide, various hydrocarbons may form when heated to decomposition.
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Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

## SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Ventilate area of leak or spill. Remove all sources of ignition. Use non-sparking tools and equipment. Clean-up personnel require protective clothing and respiratory protection from vapors. Contain and recover liquid when possible. Do not flush to sewer. Absorb with vermiculite, dry sand, earth or similar material and place in a suitable container for proper disposal.
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Waste Disposal Method	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.
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Dispose of in accordance with local, state and federal regulations.

## SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	In the laboratory work in a fume hood. In an emergency wear a NIOSH/MSHA-approved self-contained or chemical cartridge respirator.
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Ventilation	Local Exhaust	Yes (Recommended).	Special	No.
	Mechanical (General)	Yes (Explosion proof).	Other	Adequate to maintain below exposure limit.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Lab coat, goggles, eye wash station, fire extinguisher, quick-drench facilities, proper gloves, ventilation hood.
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## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Keep container tightly closed when not in use. Store in a cool, dry, well-ventilated area away from fire hazards. Wash thoroughly after handling.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Use with adequate ventilation. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 5	Date 11/30/98	Approved Michael Raszeja	Chemical Safety Coordinator	MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. \* Hazardous Materials Industrial Standards. Printed on recycled paper.

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	CYCLOHEXANE
Chemical Synonyms	Hexahydrobenzene
Formula	CH <sub>2</sub> (CH <sub>2</sub> ) <sub>4</sub> CH <sub>2</sub>
Unit Size	up to 4 Lt.
C.A.S. No.	110-82-7

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CHEMTREC  
800-424-9300  
Day 716-226-6177

NFPA  
HAZARD RATING  
LEAST SLIGHT MODERATE HIGH EXTREME  
0 1 2 3 4

Health 2  
Fire 4  
Reactivity 0  
HMIS \*  
3 4

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Cyclohexane	100%	See Section V.
DANGER! EXTREMELY FLAMMABLE! HARMFUL OR FATAL		

IF SWALLOWED OR INHALED. CAUSES IRRITATION.

## SECTION III PHYSICAL DATA

Melting Point (°F)	7°C (44.6°F)	Specific Gravity (H <sub>2</sub> O = 1)	0.784
Boiling Point (°F)	82°C (179°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	78.0 at 20°C (68°F)	Evaporation Rate (n-Butyl Acetate =1)	6.10
Vapor Density (Air=1)	2.7		
Solubility in Water	Insoluble in water.		
Appearance & Odor	Clear, colorless liquid; characteristic odor. Faint ether odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	-20°C (-4°F) TCC	Flammable Limits in Air % by Volume	Lower 1.2	Upper 8.0
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Extinguisher Media	Dry chemical (ABC); foam; carbon dioxide (CO <sub>2</sub> ).
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## SPECIAL FIREFIGHTING PROCEDURES

Water spray may be used to keep fire exposed containers cool. In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 128)

## UNUSUAL FIRE AND EXPLOSION HAZARDS

**FIRE:** Extremely flammable.  
**EXPLOSION:** Above flash point, vapor-air mixtures are explosive within flammable noted above. Vapors can flow along surfaces to distant ignition source and flash back. This highly flammable liquid must be kept from sparks, open flame, hot surfaces, and all sources of heat and ignition.

Autoignition Temperature: 245°C (473°F)

D.O.T.	Cyclohexane, 3, UN 1145, PG II
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Approved by U.S. Department of Labor "essentially similar" to form OSHA-20