



ALDON CORPORATION

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MSDS No. CC 225
Effective Date November 18, 1997

MATERIAL SAFETY DATA SHEET

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	ETHYL CELLOSOLVE
Chemical Synonyms	2-Ethoxyethanol; Ethylene Glycol Monoethyl Ether
Formula	C ₂ H ₅ OCH ₂ CH ₂ OH
Unit(s) Size	up to 20 Lt.
C.A.S. No.	110-80-5

	CHEMTREC 800-424-9300 Day 716-226-6177	Health 3 Fire 2 Reactivity 1
NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4	HMIS * HIGH EXTREME 3 4	

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	%	TLV Units
Ethyl Cellosolve	100%	TLV-TWA 5 ppm (skin)
WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED		
THROUGH SKIN. VAPOR HARMFUL. COMBUSTIBLE. CAN		
CAUSE ADVERSE REPRODUCTIVE EFFECTS.		

SECTION III PHYSICAL DATA

Melting Point (°F)	Pour point -70°C (-94°F)	Specific Gravity (H ₂ O = 1)	0.927 to 0.933
Boiling Point (°F)	135°C (275°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	3.8 mm @ 20°C (68°F)	Evaporation Rate (n-Butyl Ac. =1)	0.32
Vapor Density (Air=1)	3.1		
Solubility in Water	Complete.		
Appearance & Odor	Clear colorless liquid; mild pleasant odor whose recognition threshold for 100% of test panel unfatigued is 1.3 ppm in air.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	110°F (43°C) cc	Flammable Limits in Air % by Volume	Lower 2.6 *	Upper 15.7 @ 200°F
Extinguisher Media	Water spray; carbon dioxide (CO ₂); dry chemicals (ABC); foam.			

SPECIAL FIREFIGHTING PROCEDURES

Autoignition Temperature: 228°C (460°F).

Use blanketing effect to smother fire. Cool fire exposed metal containers with a water spray. Firefighters should use a NIOSH/MSHA-approved self-contained breathing apparatus. (OSHA Class II Combustible Liquid).

*One source has listed the lower flammability limit as 1.8%. Flash point listings as low as 104°F (TCC) have been found.

UNUSUAL FIRE AND EXPLOSION HAZARDS

This material is a moderate fire and explosion hazard when exposed to heat or flame. Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials. This material is a combustible liquid (OSHA Class II) which is considered stable under normal storage and use.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 127)

D.O.T. ETHYLENE GLYCOL MONOETHYL ETHER, 3, UN 1171, PG III

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

CC 225

Threshold Limited Value 8-hour TWA: 5 ppm 18 mg/m³ (ACGIH 1992-93) Toxicity: Oral (rat) LD50 1480 mg/kg.

Effects of Overexposure Vapors of this material are irritating and disagreeable in acutely toxic concentrations. Tears, temporary corneal clouding, drowsiness and shortness of breath and narcosis are symptoms of high concentration exposure. Toxic levels may be absorbed through skin from prolonged exposure of large skin area. Kidney and liver damage can occur with excessive exposure. Causes immediate pain in eyes.

Emergency and First Aid Procedures

EYES: Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove saturated clothing. Wash exposed area with large amounts of water. Get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **INGESTION:** If swallowed, if conscious, give water to drink. Induce vomiting and call physician. Never give anything by mouth to an unconscious person.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperature and heat. Combustible liquid (OSHA Class II).
	Stable	X	

Incompatibility (Materials to Avoid) Do not mix with strong oxidizers or alkalies.

Hazardous Decomposition Products Thermal-oxidative degradation in air produces toxic vapors and gases, including carbon monoxide, carbon dioxide.

Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X
	Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Protect from inhalation, skin and eye contact. Absorb spill in vermiculite, sand, earth or other suitable absorbent and place in impervious container. Wash spill area with soap and water.

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. Dispose of in an approved incinerator or contract with a licensed chemical waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) When using in the laboratory, work in ventilation hood. In emergency wear a NIOSH/MSHA-approved self-contained breathing apparatus.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves Neoprene. **Eye Protection** Chemical safety glasses, face shield, goggles.

Other Protective Equipment Smock, apron, eye wash station, goggles, proper gloves, fire extinguisher.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool, dry, well-ventilated area, away from fire hazards, alkalies or oxidizing materials. Storage area must be suitable for an OSHA Class II combustible liquid. Wash thoroughly after handling.

Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Do not get in eyes, on skin or clothing. Do not take internally. Avoid breathing vapor or mists. 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.

Rev. No.	No. 3	Date	11/18/97	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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