



ALDON CORPORATION

1533 W. Henrietta Rd.
Avon, New York 14414
(716) 226-6177

MSDS No. CC 225
Effective Date November 18, 1997

MATERIAL SAFETY DATA SHEET

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

| | | | | | | | | | | | | | | | | | | |
|--------------------------|---|--|----------|--------|----------|------|---------|---|---|---|---|---|--------|---|------|---|------------|---|
| Product | ETHYL CELLOSOLVE |  <p>CHEMTREC 800-424-9300 Day 716-226-6177</p> <p>NFPA HAZARD RATING</p> <table border="1"> <tr> <td>LEAST</td> <td>SLIGHT</td> <td>MODERATE</td> <td>HIGH</td> <td>EXTREME</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table> <p>HMIS *</p> <table border="1"> <tr> <td>Health</td> <td>3</td> </tr> <tr> <td>Fire</td> <td>2</td> </tr> <tr> <td>Reactivity</td> <td>1</td> </tr> </table> | LEAST | SLIGHT | MODERATE | HIGH | EXTREME | 0 | 1 | 2 | 3 | 4 | Health | 3 | Fire | 2 | Reactivity | 1 |
| LEAST | SLIGHT | | MODERATE | HIGH | EXTREME | | | | | | | | | | | | | |
| 0 | 1 | | 2 | 3 | 4 | | | | | | | | | | | | | |
| Health | 3 | | | | | | | | | | | | | | | | | |
| Fire | 2 | | | | | | | | | | | | | | | | | |
| Reactivity | 1 | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | |

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 | <p>Autoignition Temperature: 228°C (460°F).</p> <p>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).</p> <p>*One source has listed the lower flammability limit as 1.8%. Flash point listings as low as 104°F (TCC) have been found.</p> |
|--|--|

| | |
|---|--|
| UNUSUAL FIRE AND EXPLOSION HAZARDS | <p>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.</p> |
|---|--|

(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/m ³ (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 | Not applicable. | |
| May Occur | Will Not Occur | X | |

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. |
| Other Precautions | <p>Read label on container before using. Do not wear contact lenses when working with chemicals.</p> <p>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.</p> |

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 |
|----------------|---------------|--------------------------|--------------------------------|

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.