

ETHYL CYCLOHEXANE

ECY

CAUTIONARY RESPONSE INFORMATION		
Common Synonyms Cyclohexyl ethane	Liquid	Colorless
<p>Keep people away. Avoid inhalation. Shut off all ignition sources and call fire department. Avoid contact with liquid and vapor. Stay upwind and use water spray to "knock down" vapor. Notify local health and pollution control agencies. Protect water intakes.</p>		
Fire	<p>COMBUSTIBLE Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. Water may be ineffective on fire. Extinguish with foam, carbon dioxide, or dry chemicals. Cool exposed containers with water.</p>	
Exposure	<p>CALL FOR MEDICAL AID.</p> <p>VAPOR Irritating to eyes, nose, and throat. If inhaled, will cause dizziness, nausea, vomiting, or loss of consciousness. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.</p> <p>LIQUID Irritating to skin and eyes. Harmful if swallowed. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES: hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS: have victim drink water or milk.</p>	
Water Pollution	<p>Dangerous to aquatic life in high concentrations. Fouling to shoreline. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.</p>	

1. CORRECTIVE RESPONSE ACTIONS	2. CHEMICAL DESIGNATIONS
Stop discharge Contain Collection Systems: Skim Chemical and Physical Treatment: Burn Clean shore line Salvage waterfowl	<p>2.1 CG Compatibility Group: Not listed.</p> <p>2.2 Formula: (C₆H₁₂)C₂H₅</p> <p>2.3 IMO/UN Designation: Not listed</p> <p>2.4 DOT ID No.: Not listed</p> <p>2.5 CAS Registry No.: 1678-91-7</p> <p>2.6 NAERG Guide No.: Not listed</p> <p>2.7 Standard Industrial Trade Classification: 51129</p>
3. HEALTH HAZARDS	
<p>3.1 Personal Protective Equipment: Hydrocarbon vapor canister, supplied-air or hose mask, hydrocarbon-insoluble rubber or plastic gloves, chemical goggles or face splash shield, hydrocarbon-insoluble rubber or plastic apron.</p> <p>3.2 Symptoms Following Exposure: Dizziness, with nausea and vomiting. Concentrated vapor may cause collapse and unconsciousness.</p> <p>3.3 Treatment of Exposure: INHALATION: Remove victim to fresh air; if breathing stops, apply artificial respiration and administer oxygen. SKIN OR EYE CONTACT: Remove contaminated clothing and gently flush affected areas with water for at least 15 minutes; call a physician.</p> <p>3.4 TLV-TWA: Not listed.</p> <p>3.5 TLV-STEL: Not listed.</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Currently not available</p> <p>3.8 Toxicity by Inhalation: Currently not available</p> <p>3.9 Chronic Toxicity: Currently not available</p> <p>3.10 Vapor (Gas) Irritancy Characteristics: Currently not available</p> <p>3.11 Liquid or Solid Characteristics: Currently not available</p> <p>3.12 Odor Threshold: Currently not available</p> <p>3.13 IDLH Value: Not listed.</p> <p>3.14 OSHA PEL-TWA: Not listed.</p> <p>3.15 OSHA PEL-STEL: Not listed.</p> <p>3.16 OSHA PEL-Ceiling: Not listed.</p> <p>3.17 EPA AEGL: Not listed</p>	

4. FIRE HAZARDS		7. SHIPPING INFORMATION
4.1 Flash Point: 95°F C.0.	4.2 Flammable Limits in Air: 0.9-6.6%	7.1 Grades of Purity: 99+%
4.3 Fire Extinguishing Agents: Foam, carbon dioxide, or dry chemical	7.2 Storage Temperature: Currently not available	7.3 Inert Atmosphere: Currently not available
4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective against fire	7.4 Venting: Currently not available	7.5 IMO Pollution Category: (C)
4.5 Special Hazards of Combustion Products: Currently not available	7.6 Ship Type: 3	7.7 Barge Hull Type: Currently not available
4.6 Behavior in Fire: Currently not available	8. HAZARD CLASSIFICATIONS	
4.7 Auto Ignition Temperature: 460°F	8.1 49 CFR Category: Not Listed	
4.8 Electrical Hazards: Currently not available	8.2 49 CFR Class: Not Pertinent	
4.9 Burning Rate: Currently not available	8.3 49 CFR Package Group: Not listed.	
4.10 Adiabatic Flame Temperature: Currently not available	8.4 Marine Pollutant: No	
4.11 Stoichiometric Air to Fuel Ratio: 57.1 (calc.)	8.5 NFPA Hazard Classification:	
4.12 Flame Temperature: Currently not available	Category Classification	
4.13 Combustion Molar Ratio (Reactant to Product): 16.0 (calc.)	Health Hazard (Blue)..... 1	
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	Flammability (Red)..... 3	
	Instability (Yellow)..... 0	
5. CHEMICAL REACTIVITY		
5.1 Reactivity with Water: No reaction	8.6 EPA Reportable Quantity: Not listed.	
5.2 Reactivity with Common Materials: No reaction	8.7 EPA Pollution Category: Not listed.	
5.3 Stability During Transport: Stable	8.8 RCRA Waste Number: Not listed	
5.4 Neutralizing Agents for Acids and Caustics: Not pertinent	8.9 EPA FWCNA List: Not listed	
5.5 Polymerization: Not pertinent	9. PHYSICAL & CHEMICAL PROPERTIES	
5.6 Inhibitor of Polymerization: Not pertinent	9.1 Physical State at 15°C and 1 atm: Liquid	
6. WATER POLLUTION	9.2 Molecular Weight: 112.22	
6.1 Aquatic Toxicity: Currently not available	9.3 Boiling Point at 1 atm: 269°F = 132°C = 405°K	
6.2 Waterfowl Toxicity: Currently not available	9.4 Freezing Point: -168°F = -111.3°C = 162°K	
6.3 Biological Oxygen Demand (BOD): Currently not available	9.5 Critical Temperature: Currently not available	
6.4 Food Chain Concentration Potential: Currently not available	9.6 Critical Pressure: Currently not available	
6.5 GESAMP Hazard Profile: Not listed	9.7 Specific Gravity: 0.7880 @ 20°C	
	9.8 Liquid Surface Tension: Currently not available	
	9.9 Liquid Water Interfacial Tension: Currently not available	
	9.10 Vapor (Gas) Specific Gravity: 3.87 (est)	
	9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available	
	9.12 Latent Heat of Vaporization: 180 Btu/lb = 99.9 cal/g = 4.2 X 10 ⁵ J/kg	
	9.13 Heat of Combustion: -20,024 Btu/lb = -11,124 cal/g = 466 X 10 ⁵ J/kg	
	9.14 Heat of Decomposition: (est) -91,314 Btu/lb = -50,730 cal/g = -212 X 10 ⁵ J/kg	
	9.15 Heat of Solution: Currently not available	
	9.16 Heat of Polymerization: Currently not available	
	9.17 Heat of Fusion: 17.75 cal/g	
	9.18 Limiting Value: Currently not available	
	9.19 Reid Vapor Pressure: 0.6 psia	

NOTES

ETHYL CYCLOHEXANE

ECY

9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
68	49.190	80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260	0.450 0.451 0.451 0.452 0.452 0.453 0.453 0.454 0.455 0.455 0.456 0.456 0.457 0.457 0.458 0.458 0.459 0.459 0.460		C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
	C U R R E N T L Y N O T A V A I L A B L E	20 40 60 80 100 120 140 160 180 200 220 240	0.047 0.077 0.126 0.207 0.338 0.553 0.904 1.479 2.419 3.956 6.471 10.583		C U R R E N T L Y N O T A V A I L A B L E	0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600	0.025 0.031 0.036 0.042 0.047 0.053 0.058 0.064 0.069 0.074 0.080 0.085 0.091 0.096 0.102 0.107 0.113 0.118 0.124 0.129 0.135 0.140 0.146 0.151 0.157