

2-ETHYL TOLUENE

ETE

CAUTIONARY RESPONSE INFORMATION			
Common Synonyms	Watery liquid	Colorless	Pleasant odor
1-Ethyl-2-methylbenzene o-Ethylmethylbenzene o-Ethyltoluene o-Methylethylbenzene			
Floats on water. Flammable, irritating vapor is produced.			
Keep people away. Shut off ignition sources and call fire department. Avoid contact with liquid and vapor. Avoid inhalation. Stay upwind and use water spray to "knock down" vapor. Notify local health and pollution control agencies. Protect water intakes.			
Fire	COMBUSTIBLE. Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. Water may be ineffective on fire. Wear goggles and self contained breathing apparatus. Extinguish with dry chemical, foam, or carbon dioxide. Cool exposed containers with water.		
Exposure	CALL FOR MEDICAL AID. VAPOR Irritating to eyes, nose and throat. If inhaled, will cause nausea, vomiting, headache, dizziness, difficult breathing, or loss of consciousness. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. LIQUID Irritating to skin and eyes. If swallowed will cause nausea, vomiting or loss of consciousness. 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. DO NOT INDUCE VOMITING.		
Water Pollution	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.		

1. CORRECTIVE RESPONSE ACTIONS	2. CHEMICAL DESIGNATIONS
Stop discharge Contain Collection Systems: Skim Clean shore line Salvage waterfowl	2.1 CG Compatibility Group: 32; Aromatic Hydrocarbon 2.2 Formula: o-CH ₂ C ₆ H ₄ CH ₃ 2.3 IMO/UN Designation: Not Listed 2.4 DOT ID No.: Not Listed 2.5 CAS Registry No.: 611-14-3 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 51129
3. HEALTH HAZARDS	
3.1 Personal Protective Equipment: Air-supplied mask; goggles or face shield; plastic gloves.	
3.2 Symptoms Following Exposure: Vapors irritate eyes and upper respiratory tract; cause dizziness, headache, anesthesia, respiratory arrest. Liquid irritates eyes and causes drying of skin. If aspirated, causes coughing, gagging, distress, and rapidly developing pulmonary edema. If ingested causes vomiting, griping, diarrhea, depressed respiration.	
3.3 Treatment of Exposure: INHALATION: Remove to fresh air, give artificial respiration and oxygen if needed; call a doctor. INGESTION: Do NOT induce vomiting; call a doctor. EYES: Flush with water for at least 15 min. SKIN: Wipe off, wash with soap and water.	
3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed.	
3.7 Toxicity by Ingestion: Grade 2; LD ₅₀ = 5 g/kg (rat) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Kidney and liver damage may follow ingestion.	
3.10 Vapor (Gas) Irritancy Characteristics: Vapors cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.	
3.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.	
3.12 Odor Threshold: Currently not available	
3.13 IDLH Value: Not listed.	
3.14 OSHA PEL-TWA: Not listed.	
3.15 OSHA PEL-STEL: Not listed.	
3.16 OSHA PEL-Ceiling: Not listed.	
3.17 EPA AERGL: Not listed	

4. FIRE HAZARDS		7. SHIPPING INFORMATION	
4.1 Flash Point: 103°F C.C.	4.2 Flammable Limits in Air: Currently not available	7.1 Grades of Purity: Research, reagent, 99+%	7.2 Storage Temperature: Ambient
4.3 Fire Extinguishing Agents: Carbon dioxide or dry chemical for small fires. Alcohol or foam for large fires	4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective.	7.3 Inert Atmosphere: No requirement	7.4 Venting: Open (flame arrester) or pressure-vacuum
4.5 Special Hazards of Combustion Products: Not pertinent	4.6 Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back.	7.5 IMO Pollution Category: (B)	7.6 Ship Type: 3
4.7 Auto Ignition Temperature: 824°F	4.8 Electrical Hazards: Currently not available	7.7 Barge Hull Type: Currently not available	
4.9 Burning Rate: Currently not available	4.10 Adiabatic Flame Temperature: Currently not available	8. HAZARD CLASSIFICATIONS	
4.11 Stoichiometric Air to Fuel Ratio: 57.1 (calc.)	4.12 Flame Temperature: Currently not available	8.1 49 CFR Category: Not listed	8.2 49 CFR Class: Not Pertinent
4.13 Combustion Molar Ratio (Reactant to Product): 15.0 (calc.)	4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	8.3 49 CFR Package Group: Not listed.	8.4 Marine Pollutant: Yes
5. CHEMICAL REACTIVITY		8.5 NFPA Hazard Classification:	
5.1 Reactivity with Water: No reaction	5.2 Reactivity with Common Materials: No reaction	Category	Classification
5.3 Stability During Transport: Stable	5.4 Neutralizing Agents for Acids and Caustics: Not pertinent	Health Hazard (Blue).....	-
5.5 Polymerization: Not pertinent	5.6 Inhibitor of Polymerization: Not pertinent	Flammability (Red).....	2
6. WATER POLLUTION		Instability (Yellow).....	0
6.1 Aquatic Toxicity: Currently not available	6.2 Waterfowl Toxicity: Currently not available	8.6 EPA Reportable Quantity: Not listed.	8.7 EPA Pollution Category: Not listed.
6.3 Biological Oxygen Demand (BOD): Currently not available	6.4 Food Chain Concentration Potential: Currently not available	8.8 RCRA Waste Number: Not listed	8.9 EPA FWPCA List: Not listed
6.5 GESAMP Hazard Profile: Bioaccumulation: T Damage to living resources: 3 Human Oral hazard: 2 Human Contact hazard: II Reduction of amenities: XX	9. PHYSICAL & CHEMICAL PROPERTIES		
9.1 Physical State at 15° C and 1 atm: Liquid			
9.2 Molecular Weight: 120.19	9.3 Boiling Point at 1 atm: 329.4°F = 165.2°C = 438.4°K	9.4 Freezing Point: -113.4°F = -80.8°C = 192.4°K	9.5 Critical Temperature: Currently not available
9.6 Critical Pressure: Currently not available	9.7 Specific Gravity: 0.8807 at 20°C (liquid)	9.8 Liquid Surface Tension: 15.2 dyne/cm = 0.0152 N/m @ 161°C	9.9 Liquid Water Interfacial Tension: Currently not available
9.10 Vapor (Gas) Specific Gravity: 4.15	9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available	9.12 Latent Heat of Vaporization: 200 Btu/lb = 111 cal/g = 4.6 x 10 ⁵ J/kg	9.13 Heat of Combustion: -18,650 Btu/lb = -10,361 cal/g = -434 x 10 ⁵ J/kg
9.14 Heat of Decomposition: (est) -19,998 Btu/lb = -11,110 cal/g = -465 X 10 ⁵ J/kg	9.15 Heat of Solution: Not pertinent	9.16 Heat of Polymerization: Not pertinent	9.17 Heat of Fusion: Currently not available
9.18 Limiting Value: Currently not available	9.19 Reid Vapor Pressure: 0.2 psia	9.20 Heat of Condensation: Not pertinent	

NOTES

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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	54.980	260	0.403		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	60 80 100 120 140 160 180 200 220 240 260 280 300 320	0.028 0.077 0.167 0.315 0.538 0.855 1.288 1.857 2.585 3.497 4.618 5.974 7.591 9.498		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	0.268 0.281 0.293 0.305 0.317 0.329 0.342 0.354 0.366 0.378 0.390 0.403 0.415 0.427 0.439 0.451 0.464 0.476 0.488 0.500 0.512 0.525 0.537 0.549 0.561