

TERT-BUTYL ACETATE

BYA

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION				
Common Synonyms Acetic acid, tert-butyl ester	Liquid	Colorless	Mild	<p>4.1 Flash Point: Currently not available</p> <p>4.2 Flammable Limits in Air: Currently not available</p> <p>4.3 Fire Extinguishing Agents: Alcohol foam, CO_2, dry chemical</p> <p>4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective.</p> <p>4.5 Special Hazards of Combustion Products: Currently not available</p> <p>4.6 Behavior in Fire: Currently not available</p> <p>4.7 Auto Ignition Temperature: Currently not available</p> <p>4.8 Electrical Hazards: Currently not available</p> <p>4.9 Burning Rate: Currently not available</p> <p>4.10 Adiabatic Flame Temperature: Currently not available</p> <p>4.11 Stoichiometric Air to Fuel Ratio: 38.1 (calc.)</p> <p>4.12 Flame Temperature: Currently not available</p> <p>4.13 Combustion Molar Ratio (Reactant to Product): 12.0 (calc.)</p> <p>4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed</p>	<p>7.1 Grades of Purity: Currently not available</p> <p>7.2 Storage Temperature: Currently not available</p> <p>7.3 Inert Atmosphere: Currently not available</p> <p>7.4 Venting: Currently not available</p> <p>7.5 IMO Pollution Category: C</p> <p>7.6 Ship Type: 3</p> <p>7.7 Barge Hull Type: Currently not available</p>				
Fire	FLAMMABLE Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. Extinguish with dry chemical foam or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water.				8. HAZARD CLASSIFICATIONS				
Exposure	CALL FOR MEDICAL AID. VAPOR Irritating to eyes, nose, and throat. If inhaled will cause nausea, headache, or difficult breathing. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. LIQUID Irritating to eyes. Harmful if swallowed. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water.				<p>8.1 49 CFR Category: Flammable liquid</p> <p>8.2 49 CFR Class: 3</p> <p>8.3 49 CFR Package Group: II</p> <p>8.4 Marine Pollutant: No</p> <p>8.5 NFPA Hazard Classification: Not listed</p> <p>8.6 EPA Reportable Quantity: 5000 pounds</p> <p>8.7 EPA Pollution Category: D</p> <p>8.8 RCRA Waste Number: Not listed</p> <p>8.9 EPA FWPCA List: Not listed</p>				
Water Pollution	Effects of low concentrations on aquatic life are unknown. Fouling to shoreline. May be dangerous if it enters water intakes. Notify local health and pollution control authorities. Notify operators of nearby water intakes.				<p>9.1 Physical State at 15°C and 1 atm: Liquid</p> <p>9.2 Molecular Weight: 116.16</p> <p>9.3 Boiling Point at 1 atm: 208°F = 97.8°C = 370.8°K</p> <p>9.4 Freezing Point: Currently not available</p> <p>9.5 Critical Temperature: Currently not available</p> <p>9.6 Critical Pressure: Currently not available</p> <p>9.7 Specific Gravity: 0.8665 at 20°C; 0.8593 at 25°C</p> <p>9.8 Liquid Surface Tension: Currently not available</p> <p>9.9 Liquid Water Interfacial Tension: Currently not available</p> <p>9.10 Vapor (Gas) Specific Gravity: Currently not available</p> <p>9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available</p> <p>9.12 Latent Heat of Vaporization: Currently not available</p> <p>9.13 Heat of Combustion: Currently not available</p> <p>9.14 Heat of Decomposition: Currently not available</p> <p>9.15 Heat of Solution: Currently not available</p> <p>9.16 Heat of Polymerization: Currently not available</p> <p>9.17 Heat of Fusion: Currently not available</p> <p>9.18 Limiting Value: Currently not available</p> <p>9.19 Reid Vapor Pressure: Currently not available</p>				
1. CORRECTIVE RESPONSE ACTIONS Stop discharge Dilute and disperse Contain Collection Systems: Skim Chemical and Physical Treatment: Burn Clean shore line Salvage waterfowl		2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: 34; Esters 2.2 Formula: $\text{CH}_3\text{COOC}(\text{CH}_3)_2\text{C}_2\text{H}_5\text{O}_2$ 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: 1123 2.5 CAS Registry No.: 540-88-5 2.6 NAERG Guide No.: 129 2.7 Standard Industrial Trade Classification: 51372		3. HEALTH HAZARDS 3.1 Personal Protective Equipment: Organic vapor canister or air-supplied mask; chemical goggles or face splash shield. 3.2 Symptoms Following Exposure: INHALATION: Irritation of throat. EYES: Irritation. 3.3 Treatment of Exposure: Currently not available 3.4 TLV-TWA: 200 ppm. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Currently not available 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Minor allergen and irritant. 3.10 Vapor (Gas) Irritant Characteristics: Vapors cause a slight smarting of eyes or respiratory system, if present in high concentrations the effect is temporary. 3.11 Liquid or Solid Characteristics: Currently not available 3.12 Odor Threshold: Detection in water 4 ppb. 3.13 IDLH Value: 1,500 ppm 3.14 OSHA PEL-TWA: 200 ppm. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA A EGL: Not listed		5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: Currently not available 5.2 Reactivity with Common Materials: Currently not available 5.3 Stability During Transport: Currently not available 5.4 Neutralizing Agents for Acids and Caustics: Currently not available 5.5 Polymerization: Currently not available 5.6 Inhibitor of Polymerization: Currently not available			
6. WATER POLLUTION 6.1 Aquatic Toxicity: Currently not available 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): Currently not available 6.4 Food Chain Concentration Potential: Currently not available 6.5 GESAMP Hazard Profile: Not listed									
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	54.075		C U R R E N T L Y		C U R R E N T L Y		C U R R E N T L Y
69	54.032		N O T A V A I L A B L E		N O T A V A I L A B L E		N O T A V A I L A B L E
70	53.989						
71	53.948						
72	53.909						
73	53.870						
74	53.832						
75	53.796						
76	53.760						
77	53.725						

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
	I N S O L U B L E		C U R R E N T L Y		C U R R E N T L Y		C U R R E N T L Y
			N O T A V A I L A B L E		N O T A V A I L A B L E		N O T A V A I L A B L E