GASOLINE BLENDING STOCKS: ALKYLATES

Common Syne		1	DNSE INFORMA	-		
	onyms	Watery liquid	Colorless	Gasoline odor		
Shut off ig Stay upwi	ble away. mical protective nition sources nd and use wat	e suit with self-contai and call fire departm ter spray to ``knock d	own" vapor.	s produced.		
	al health and po ater intakes.	ollution control agenci	es.			
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.					
xposure	CALL FOR MEDICAL AID. VAPOR Irritating to eyes, nose and throat. If inhaled, will cause dizziness, headache, 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 and vomiting. Remove contaminated clothing and shoes. Flush afflected areas with plenty of water. IF IN EYES, hold eyeldes open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.					
Water Pollution	DO NOT INDUCE VOMITING. HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. Fouling to shoreline. May be dangerous if it enters water intakes. Notify local health and wildlife officials.					
		3. HEALTH H	33411	ial Trade Classification:		
 Symptoms FO nervous sy headache, dangerous dyspnea, i bronchopr depression storach; Treatment of needed. A voriting; I EYES: we I TLV-TWA: Noi TLV-STEL: Noi TLV-STEL: Noi TLV-STEL: Noi TLV-STEL: Noi Chronic Toxic O Vapor (Gas) I system if L Liquid or Soli 	Ilowing Expos system stimulati yand incoordin complication. INGESTION stimulation folic Exposure: Se SPIRATION: of avage carefully sh with copiou t listed. SUSPIRATION: of avage carefully t listed. dot listed. gestion: Curre rritant Charac present in high d Characteris arting and redd lot listed. US fisted. So fisted. WA: Not listed. WA: Not listed.	nent: Protective gog sure: INHALATION c: on followed by depre ation to anesthesia, ASPIRATION cause ress, and rapidly devi neumonitis; acute or l causes irritation of 1 wwed by depression c ek medical attention. enforce bed rest; adr if appreciable quant is quantity of water. S e 2; LD ₅₀ = 0.5 to 5 g ently not available. teristics: Vapors can concentrations. The tics: Minimum hazard ening of the skin.	gles, gloves. auses irritation of upper res ssion of varying degrees re- soma, and respiratory arre- s severe lung irritation with aloping pulmonary edema; set of central nervous syst mucous membranes of thro- f central nervous system; INHALATION: maintain re ninister oxygen. INGESTIC ity was ingested; guard ags SKIN: wipe off and wash w /kg use a slight smarting of the	inging from dizziness, st; riregular heartbeat is coughing, gagging, ater, signs of em excitement followed by at, esophagus, and rregular heartbeat. spiration; give oxygen if N: do NOT induce ainst aspiration into lungs. ith soap and water.		

 4. FIRE HAZARDS 4.1 Flash Point: (a) <pre>(a) <pre>(b) <pre>(c) <p< th=""><th>7. SHIPPING INFORMATION 7.1 Grades of Purity: Composition varies with range of distillation temperatures used. 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) or pressure vacuum 7.5 IMO Pollution Category: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8. 402 CFR Category: Flammable liquid 8. 403 Stress and Stress and Stress and Stress 8.5 NFPA Hazard Classification: Category Classification Health Hazard (Blue)</th></p<></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>	7. SHIPPING INFORMATION 7.1 Grades of Purity: Composition varies with range of distillation temperatures used. 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) or pressure vacuum 7.5 IMO Pollution Category: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8. 402 CFR Category: Flammable liquid 8. 403 Stress and Stress and Stress and Stress 8.5 NFPA Hazard Classification: Category Classification Health Hazard (Blue)
 4.1 Flash Point: (a) <pre>d⁹</pre> C.C. (b) 0-73° C.C. 4.2 Flammable Limits in Air: (a) 1.1%-8.7% 4.3 Fire Extinguishing Agents: Dry chemical, foam, carbon dioxide 4.4 Fire Extinguishing Agents: Dry chemical, foam, carbon dioxide 4.5 Special Hazards of Combustion Products: None 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. Auto Ignition Temperature: Currently not available 4.8 Electrical Hazards: Class I, group D 4.9 Burning Rate: 4 mr/min. 4.10 Adiabatic Flame Temperature: Currently not available 4.11 Stoichometric Air to Fuel Ratio: Not pertinent 4.12 Flame Temperature: Currently not available 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shadTL-/sfab water 91 ppm/24 hr/juvenile American shadTL-/sfab water 8.4 Food Chain Concentration Potential: None 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 	 7.1 Grades of Purity: Composition varies with range of distillation temperatures used. 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) or pressure vacuum 7.5 IMO Pollution Category: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Package Group: II 8.4 Marine Pollutant: Yes 8.5 NFPA Hazard Classification: Category Classification: Mealth Hazard (Blue)
 (a) <0°F C.C. (b) 0–73°F C.C. 4.2 Flammable Limits in Air: (a) 1.1%-8.7% 4.3 Fire Extinguishing Agents: Dry chemical, foam, carbon dioxide 4.4 Fire Extinguishing Agents: Not to Be Used: Water may be ineffective 4.5 Special Hazards of Combustion Products: None 4.6 Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back. 4.7 Auto Ignition Temperature: Currently not available 4.8 Electrical Hazards: Class I, group D 4.9 Burning Rate: 4 mr/min. 4.10 Adiabatic Flame Temperature: Currently not available 4.12 Flame Temperature: Currently not available 4.13 Extormetric Air to Fuel Ratio: Not pertinent 4.14 Hinimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Istability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shadTL-/sfash water 9.1 ppm/24 hr/juvenile American shadTL-sfash water 9.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	range of distillation temperatures used. 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) or pressure vacuum 7.5 IMO Pollution Category: Currently not ava 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Class: 3 8.3 49 CFR Class: 3 8.3 49 CFR Class: 3 8.3 49 CFR Class: 3 8.5 NFPA Hazard Classification: Category Classification: Health Hazard (Blue) 1
 4.2 Flammable Limits in Air: (a) 1.1%-8.7% 4.3 Fire Extinguishing Agents: Dry chemical, Ioam, carbon dioxide 4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective 4.5 Special Hazards of Combustion Products: None 4.6 Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back. 4.7 Auto Ignition Temperature: Currently not available 4.8 Electrical Hazards: Class I, group D 4.9 Burning Rate: 4 mm/min. 4.10 Adiabatic Flame Temperature: Currently not available 4.11 Stoichometric Air to Fuel Ratio: Not pertinent 4.12 Flame Temperature: Currently not available 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction for Cambustion (MOCC): Not listed 5. Polymerization: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shadTu_wrise hwater 94 ppm/24 hr/juvenile American shadTu_wrise hwater 9.4 Food Chain Concentration Potential: Nor available 6.5 GESAMP Hazard Profile: Not listed 	 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) or pressure vacuum 7.5 IMO Pollution Category: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Package Group: II 8.4 Marine Pollutant: Yes 8.5 NFPA Hazard Classification: Category Classification: Health Hazard (Blue) 1
 Fire Extinguishing Agents: Dry chemical, foam, carbon dioxide Fire Extinguishing Agents Not to Be Used: Water may be inelfective Special Hazards of Combustion Products: None Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back. Auto Ignition Temperature: Currently not available Electrical Hazards: Class I, group D Burning Rate: 4 mm/min. Auto Ignition Temperature: Currently not available Stoichometric Air to Fuel Ratio: Not pertinent Stoichometric Air to Fuel Ratio: Not pertinent Stoichometric Air to Fuel Ratio: Not pertinent Chemical Mazards: Class I, group D Burning Rate: 4 mm/min. Stoichometric Air to Fuel Ratio: Not pertinent Stoichometric Air to Fuel Ratio: Not pertinent Stoichometric Air to Fuel Ratio: Not pertinent Stoichometric Not pertinent Minimum Oxygen Concentration for Combustion (MOCC): Not listed CHEMICAL REACTIVITY Reactivity with Water: No reaction Reactivity with Common Materials: No reaction Reactivity with Common Materials: No reaction Reactivity With Queris And Caustics: Not pertinent Not pertinent Augutic Toxicity: Superisent Not pertinent Augutic Toxicity: Superise American shad/TL/sfresh water Podymerization: Not pertinent Waterfowl Toxicity: Currently not available Biological Oxygen Demand (BOD): 8%, 5 days GeESAMP Hazard Profile: Not listed 	 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) or pressure vacuum 7.5 IMO Pollution Category: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Package Group: II 8.4 Marine Pollutant: Yes 8.5 NFPA Hazard Classification: Category Classification: Category Classification Hath Hazard (Blue)
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Used: Water may be ineffective 5 Special Hazards of Combustion Products: None 6 Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back. 7 Auto Ignition Temperature: Currently not available 8 Electrical Hazards: Class I, group D 9 Burning Rate: 4 mm/min. 10 Adiabatic Flame Temperature: Currently not available 11 Stoichometric Air to Fuel Ratio: Not pertinent 12 Flame Temperature: Currently not available 13 Combustion Molar Ratio (Reactant to Product): Not pertinent 14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 1. Reactivity with Water: No reaction 2. Reactivity with Water: No reaction 3. Stability During Transport: Stable 4. Neutralizing Agents for Acids and Caustics: Not pertinent 5. Polymerization: Not pertinent 6. WATER POLLUTION 1. Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL-//sfl water 2. Waterfowl Toxicity: Currently not available 3. Biological Oxygen Demand (BOD): 8%, 5. days 4. Food Chain Concentration Potential: None 5. GESAMP Hazard Profile: Not listed	7.5 IMO Pollution Category: Currently not available 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Package Group: II 8.4 Marine Pollutant: Yes 8.5 NFPA Hazard Classification: Category Classification Health Hazard (Blue)
 Special Hazards of Combustion Products: None Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back. Auto Ignition Temperature: Currently not available Electrical Hazards: Class I, group D Burning Rate: 4 mm/min. 10 Adiabatic Flame Temperature: Currently not available 11 Stoichometric Air to Fuel Ratio: Not pertinent 12 Flame Temperature: Currently not available 13 Combustion Molar Ratio (Reactant to Product): Not pertinent 14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5. Reactivity with Water: No reaction feaction 3. Stability During Transport: Stable 4. Neutralizing Agents for Acids and Caustics: Not pertinent 5. Polymerization: Not pertinent 6. WATER POLLUTION 14. Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/Tu_/resh water 91 ppm/24 hr/juvenile American shad/Tu_/resh water 21 Waterfowl Toxicity: Currently not available 22 Waterfowl Toxicity: Currently not available 23 Biological Oxygen Demand (BOD): 8%, 5 days 24 Food Chain Concentration Potential: None 25 GESAMP Hazard Profile: Not listed 	7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Package Group: II 8.4 Marine Pollutant: Yes 8.5 NFPA Hazard Classification: Category Classification Health Hazard (Blue)
 1.5 Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back. 1.7 Auto Ignition Temperature: Currently not available 1.8 Electrical Hazards: Class I, group D 1.9 Burning Rate: 4 mm/min. 1.10 Adiabatic Flame Temperature: Currently not available 1.11 Stoichometric Air to Fuel Ratio: Not pertinent 1.12 Flame Temperature: Currently not available 1.13 Combustion Molar Ratio (Reactant to Product): Not pertinent 1.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Water: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 5.1 Aquatic Toxicity: S0 ppm/24 hr/juvenile American shad/Tu_/resh water S1 ppm/24 hr/juvenile American shad/Tu_/resh water 3.1 Biological Oxygen Demand (BOD): 8%, 5 days 5.4 Food Chain Concentration Potential: None 	7.7 Barge Hull Type: Currently not available 8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Package Group: II 8.4 Marine Pollutant: Yes 8.5 NFPA Hazard Classification: Category Classification Health Hazard (Blue)
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 4.12 Flame Temperature: Currently not available 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Common Materials: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL_n/salt water 8.1 governover and the American shad/TL_n/salt water 8.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	Flammability (Red) 3
 available 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 pm/24 hr/juvenile American shad/TL=/firesh water 91 ppm/24 hr/juvenile American shad/TL=/stresh water 8.1 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	
Product): Not pertiment 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Common Materials: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertiment 5.5 Polymerization: Not pertiment 5.6 Inhibitor of Polymerization: Not pertiment 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL_//salt water 91 ppm/24 hr/juvenile American shad/TL_//salt water 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed	Instability (Yellow)0
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed 5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL-/afresh water 91 ppm/24 hr/juvenile American shad/TL-/afresh water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed	8.6 EPA Reportable Quantity: Not listed.
 5. CHEMICAL REACTIVITY 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6.1 Aquatic Toxicity: 90 pmr/24 hr/juvenile American shad/TL_/firesh water 91 ppm/24 hr/juvenile American shad/TL_/stresh water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	 8.7 EPA Pollution Category: Not listed. 8.8 RCRA Waste Number: Not listed
 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization:: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL/salt water 91 ppm/24 hr/juvenile American shad/TL/salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	8.9 EPA FWPCA List: Not listed
 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenie American shad/TL/salt water 91 ppm/24 hr/juvenie American shad/TL/salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	
 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL/salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	9. PHYSICAL & CHEMICAL
 reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL_n/fresh water 91 ppm/24 hr/juvenile American shad/TL_n/salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	PROPERTIES
 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL_/fresh water 91 ppm/24 hr/juvenile American shad/TL_/salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	9.1 Physical State at 15° C and 1 atm: Liquid
Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL_n/salt water 91 ppm/24 hr/juvenile American shad/TL_n/salt water 6.2 Waterfow Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed	9.2 Molecular Weight: Not pertinent
 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL-/fresh water 91 ppm/24 hr/juvenile American shad/TL-/star water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	9.3 Boiling Point at 1 atm: 58–275°F =
 5.6 Inhibitor of Polymerization: Not pertinent 6. WATER POLLUTION 6.1 Aquatic Toxicity: 90 ppm/24 hr/juvenie American shad/TL.//fresh water 91 ppm/24 hr/juvenie American shad/TL.//salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	14–135°C = 287–408°K 9.4 Freezing Point: Not pertinent
 5.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL_/fresh water 61 ppm/24 hr/juvenile American shad/TL_/salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	9.5 Critical Temperature: Not pertinent
 5.1 Aquatic Toxicity: 90 ppm/24 hr/juvenile American shad/TL_/fresh water 91 ppm/24 hr/juvenile American shad/TL_/salt water 5.2 Waterfow IT oxicity: Currently not available 5.3 Biological Oxygen Demand (BOD): 8%, 5 days 5.4 Food Chain Concentration Potential: None 5.5 GESAMP Hazard Profile: Not listed 	9.6 Critical Pressure: Not pertinent
 90 ppm/24 hr/juvenile American shad/TL./rsah water 91 ppm/24 hr/juvenile American shad/TL./salt water 8.2 Waterfowl Toxicity: Currently not available 8.3 Biological Oxygen Demand (BOD): 8%, 5 days 5.4 Food Chain Concentration Potential: None 8.5 GESAMP Hazard Profile: Not listed 	9.7 Specific Gravity: 0.71-0.75 at 15°C (liquid
 shad/TL.//rtrsh water 91 pm/24 hr/juvenile American shad/TL.//salt water 22 Waterfowl Toxicity: Currently not available 5.3 Biological Oxygen Demand (BOD): 8%, 5 days 5.4 Food Chain Concentration Potential: None 5.5 GESAMP Hazard Profile: Not listed 	9.8 Liquid Surface Tension: 19-23 dynes/cm 0.019-0.023 N/m at 20°C
 shad/TL_/salt water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	9.9 Liquid Water Interfacial Tension: 49-51
 6.2 Waterfowl Toxicity: Currently not available 5.8 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed 	dynes/cm = 0.049-0.051 N/m at 20°C
available 6.3 Biological Oxygen Demand (BOD): 8%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed	9.10 Vapor (Gas) Specific Gravity: 3.4
5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed	9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
 5.4 Food Chain Concentration Potential: None 5.5 GESAMP Hazard Profile: Not listed 	9.12 Latent Heat of Vaporization: 130–150
None 6.5 GESAMP Hazard Profile: Not listed	Btu/lb = $71-81$ cal/g = $3.0-3.4 \times 10^5$ J/kg
	9.13 Heat of Combustion: -18,720 Btu/lb =
NOTI	-10,400 cal/g = -435.4 X 10 ⁵ J/kg 9.14 Heat of Decomposition: Not pertinent
NOTI	9.15 Heat of Solution: Not pertinent
NOTI	9.16 Heat of Polymerization: Not pertinent
NOTI	9.17 Heat of Fusion: Currently not available
NOT	9.18 Limiting Value: Currently not available
NOT	9.19 Reid Vapor Pressure: Currently not
NOT	available
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GASOLINE BLENDING STOCKS: ALKYLATES

	9.20 LIQUID DENSITY		21 IT CAPACITY		22 L CONDUCTIVITY		23 ISCOSITY
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
35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 100 105 125 130 135 140 145 155 160	45.040 44.880 44.730 44.570 44.470 44.260 44.100 43.950 43.390 43.630 43.630 43.320 43.610 43.320 43.610 42.250 42.200 42.240 42.230 42.230 42.230 42.230 42.230 42.230 41.290 41.460 41.450 41.490	10 15 20 25 30 45 55 60 65 70 75 80 85 90 95 95 100 105	0.459 0.462 0.464 0.467 0.472 0.475 0.475 0.478 0.483 0.486 0.483 0.486 0.493 0.493 0.496 0.499 0.501 0.507 0.509	40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190	0.909 0.900 0.891 0.883 0.874 0.865 0.856 0.847 0.838 0.829 0.821 0.812 0.812 0.812 0.812 0.794 0.785 0.776	46 48 50 52 54 56 60 62 64 66 68 70 72 74 76 78 80 82 82 84 86 88 90 92 94 96	0.494 0.487 0.481 0.475 0.469 0.463 0.457 0.451 0.445 0.440 0.434 0.429 0.424 0.419 0.414 0.419 0.414 0.419 0.414 0.399 0.395 0.395 0.395 0.386 0.381 0.377 0.373 0.369 0.365

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 N O T A V A I L A B L E		N O T E R T I N E N T		C U R R E N T L Y NOT A V A I L A B L E