

JET FUELS: JP-3

JPT

CAUTIONARY RESPONSE INFORMATION

Common Synonyms	Watery liquid Colorless Fuel oil odor
	Floats on water. Irritating, combustible vapor may be produced.
<p>Keep people away. Avoid contact with liquid and vapor. Shut off ignition sources and call fire department. Stay upwind and use water spray to "knock down" vapor. Notify local health and pollution control agencies.</p>	
Fire	Combustible. Extinguish with dry chemical, foam, or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water.
Exposure	CALL FOR MEDICAL AID. VAPOR Irritating to eyes, nose and throat. If inhaled, will cause coughing, dizziness, headache, or difficult breathing. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. 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. 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.

<p>1. CORRECTIVE RESPONSE ACTIONS</p> Stop discharge Contain Collection Systems: Skim Chemical and Physical Treatment: Burn Clean shore line Salvage waterfowl	<p>2. CHEMICAL DESIGNATIONS</p> 2.1 CG Compatibility Group: 33; Miscellaneous Hydrocarbon Mixtures 2.2 Formula: C ₁₂ H ₂₄ 2.3 IMQ/UN Designation: 3.3/1223 2.4 DOT ID No.: 1863 2.5 CAS Registry No.: Currently not available 2.6 NAERG Guide No.: 128 2.7 Standard Industrial Trade Classification: 33412
<p>3. HEALTH HAZARDS</p> 3.1 Personal Protective Equipment: Protective gloves; goggles or face shield. 3.2 Symptoms Following Exposure: Vapor causes slight irritation of eyes and nose. Liquid irritates stomach; if taken into lungs, causes coughing, distress, and rapidly developing pulmonary edema. 3.3 Treatment of Exposure: ASPIRATION: enforce bed rest; administer oxygen; call a doctor. INGESTION: do NOT induce vomiting; call a doctor. EYES: wash with plenty of water. SKIN: wipe off and 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 = 0.5 to 5 g/kg 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 3.10 Vapor (Gas) Irritant 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: 1 ppm 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 AEGL: Not listed	

<p>4. FIRE HAZARDS</p> 4.1 Flash Point: 110-150°F 4.2 Flammable Limits in Air: Currently not available 4.3 Fire Extinguishing Agents: Foam, dry chemical, or carbon dioxide 4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent 4.5 Special Hazards of Combustion Products: Not pertinent 4.6 Behavior in Fire: Not pertinent 4.7 Auto Ignition Temperature: Currently not available 4.8 Electrical Hazards: Not pertinent 4.9 Burning Rate: 4 mm/min. 4.10 Adiabatic Flame Temperature: Currently not available 4.11 Stoichiometric 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): N ₂ diluent: 12.0%; CO ₂ diluent: 14.5%	<p>7. SHIPPING INFORMATION</p> 7.1 Grades of Purity: 100% 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) 7.5 IMO Pollution Category: Currently not available 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available
<p>5. CHEMICAL REACTIVITY</p> 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	<p>8. HAZARD CLASSIFICATIONS</p> 8.1 49 CFR Category: Flammable liquid 8.2 49 CFR Class: 3 8.3 49 CFR Package Group: III 8.4 Marine Pollutant: No 8.5 NFPA Hazard Classification:
<p>6. WATER POLLUTION</p> 6.1 Aquatic Toxicity: 2990 ppm/24 hr/bluegill/TL _m /fresh water 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 53%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Not listed	<p>9. PHYSICAL & CHEMICAL PROPERTIES</p> 9.1 Physical State at 15° C and 1 atm: Liquid 9.2 Molecular Weight: Not pertinent 9.3 Boiling Point at 1 atm: 86-500°F = 30-260°C = 303-533°K 9.4 Freezing Point: Not pertinent 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 0.80 at 20°C (liquid) 9.8 Liquid Surface Tension: Currently not available 9.9 Liquid Water Interfacial Tension: Currently not available 9.10 Vapor (Gas) Specific Gravity: Not pertinent 9.11 Ratio of Specific Heats of Vapor (Gas): (est.) 1.030 9.12 Latent Heat of Vaporization: 140 Btu/lb = 78 cal/g = 3.3 X 10 ⁵ J/kg 9.13 Heat of Combustion: -18,540 Btu/lb = -10,300 cal/g = -431.24 X 10 ⁵ J/kg 9.14 Heat of Decomposition: Not pertinent 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: Currently not available

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
32	49.940	0	0.444	0	1.458	-35	2.106
34	49.940	10	0.449	10	1.456	-30	1.994
36	49.940	20	0.454	20	1.454	-25	1.890
38	49.940	30	0.459	30	1.452	-20	1.794
40	49.940	40	0.464	40	1.450	-15	1.705
42	49.940	50	0.469	50	1.448	-10	1.622
44	49.940	60	0.474	60	1.446	-5	1.544
46	49.940	70	0.479	70	1.444	0	1.472
48	49.940	80	0.484	80	1.442	5	1.405
50	49.940					10	1.342
52	49.940					15	1.283
54	49.940					20	1.228
56	49.940					25	1.176
58	49.940					30	1.128
60	49.940					35	1.082
62	49.940					40	1.039
64	49.940					45	0.999
66	49.940					50	0.961
68	49.940					55	0.925
70	49.940					60	0.891
72	49.940					65	0.859
74	49.940					70	0.829
76	49.940					75	0.800
78	49.940						
80	49.940						
82	49.940						

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	0	0.855		N		C
	N	10	1.092		O		U
	S	20	1.379		T		R
	O	30	1.726				R
	L	40	2.141		P		E
	U	50	2.634		E		N
	B	60	3.213		R		T
	L	70	3.891		T		L
	E	80	4.679		I		Y
		90	5.589		N		
		100	6.633		E		N
		110	7.825		N		O
		120	9.178		T		T
		130	10.710				
		140	12.430				A
		150	14.360				V
		160	16.500				A
		170	18.890				I
		180	21.530				L
		190	24.440				A
		200	27.640				B
		210	31.140				L
							E