

OILS, FUEL: 2

OTW

CAUTIONARY RESPONSE INFORMATION			
Common Synonyms Home-heating oil	Oily liquid	Yellow-brown	Lube or fuel oil odor Floats on water.
Keep people away. Avoid contact with liquid. Shut off ignition sources and call fire department. Notify local health and pollution control agencies. Protect water intakes.			
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. LIQUID Irritating to skin and eyes. If swallowed, will cause nausea, vomiting. 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	3. HEALTH HAZARDS	4. FIRE HAZARDS	5. CHEMICAL REACTIVITY	6. WATER POLLUTION	7. SHIPPING INFORMATION	8. HAZARD CLASSIFICATIONS	9. PHYSICAL & CHEMICAL PROPERTIES								
<p>Stop discharge Contain Collection Systems: Skin Chemical and Physical Treatment: Burn Clean shore line Salvage waterfowl</p> <p>3.1 Personal Protective Equipment: Protective gloves; goggles or face shield.</p> <p>3.2 Symptoms Following Exposure: INHALATION causes headache and slight giddiness. INGESTION causes nausea, vomiting, and cramping; depression of central nervous system ranging from mild headache to anesthesia, coma, and death; pulmonary irritation secondary to exhalation of solvent; signs of kidney and liver damage may be delayed. ASPIRATION causes severe lung irritation with coughing, gagging, dyspnea, substernal distress, and rapidly developing pulmonary edema; later, signs of bronchopneumonia and pneumonitis; acute onset of central nervous system excitement followed by depression.</p> <p>3.3 Treatment of Exposure: INGESTION: do NOT induce vomiting. ASPIRATION: enforce bed rest; administer oxygen; seek medical attention. EYES: wash with copious quantity of water. SKIN: remove solvent by wiping and wash with soap and water.</p> <p>3.4 TLV-TWA: Notice of intended change: 100 mg/m³ (skin)</p> <p>3.5 TLV-STEL: Not listed.</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Grade 1; LD₅₀ = 5-15 g/kg</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) Irritant Characteristics: Slight smarting of eyes or respiratory system if present in high concentrations. The effect is temporary.</p> <p>3.11 Liquids or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of skin.</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>	<p>2.1 CG Compatibility Group: 33; Miscellaneous Hydrocarbon Mixtures</p> <p>2.2 Formula: Not applicable</p> <p>2.3 IMO/UN Designation: 3.3/1223</p> <p>2.4 DOT ID No.: 1993</p> <p>2.5 CAS Registry No.: 68476-30-2</p> <p>2.6 NAERG Guide No.: 128</p> <p>2.7 Standard Industrial Trade Classification: 33440</p>	<p>3.1 Personal Protective Equipment: Protective gloves; goggles or face shield.</p> <p>3.2 Symptoms Following Exposure: INHALATION causes headache and slight giddiness. 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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
50	54.740	30	0.429	30	0.908	0	3.773
52	54.740	35	0.431	35	0.908	10	3.397
54	54.740	40	0.434	40	0.908	20	3.071
56	54.740	45	0.436	45	0.908	30	2.788
58	54.740	50	0.439	50	0.908	40	2.541
60	54.740	55	0.441	55	0.908	50	2.324
62	54.740	60	0.443	60	0.908	60	2.134
64	54.740	65	0.446	65	0.908	70	1.965
66	54.740	70	0.448	70	0.908	80	1.815
68	54.740	75	0.451	75	0.908	90	1.681
70	54.740	80	0.453	80	0.908	100	1.561
72	54.740	85	0.456	85	0.908	110	1.454
74	54.740	90	0.458	90	0.908	120	1.358
76	54.740	95	0.460	95	0.908	130	1.270
78	54.740	100	0.463	100	0.908	140	1.191
80	54.740	105	0.465	105	0.908	150	1.120
82	54.740	110	0.468	110	0.908	160	1.054
84	54.740	115	0.470	115	0.908	170	0.995
		120	0.472	120	0.908	180	0.940
		125	0.475	125	0.908	190	0.890
		130	0.477	130	0.908	200	0.844
						210	0.802

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	55	0.466		N		O	N
N	60	0.474		O		T	O
S	65	0.481		P		R	P
O	70	0.489		E		I	E
L	75	0.497		T		N	T
U	80	0.505		I		E	I
B	85	0.512		N		N	N
L	90	0.520		E		E	E
E	95	0.528		T		T	T
	100	0.535					
	105	0.543					
	110	0.550					
	115	0.558					
	120	0.565					
	125	0.573					
	130	0.580					