

# GAS OIL: CRACKED

GOC

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION									
Common Synonyms	Liquid	Colorless	Gasoline-like odor Floats on water.	<p><b>4.1 Flash Point:</b> 150°F C.C.</p> <p><b>4.2 Flammable Limits in Air:</b> 6.0%-13.5%</p> <p><b>4.3 Fire Extinguishing Agents:</b> Water, foam, carbon dioxide, or dry chemical</p> <p><b>4.4 Fire Extinguishing Agents Not to Be Used:</b> Not pertinent</p> <p><b>4.5 Special Hazards of Combustion Products:</b> Not pertinent</p> <p><b>4.6 Behavior in Fire:</b> Not pertinent</p> <p><b>4.7 Auto Ignition Temperature:</b> 640°F</p> <p><b>4.8 Electrical Hazards:</b> Not pertinent</p> <p><b>4.9 Burning Rate:</b> 4 mm/min.</p> <p><b>4.10 Adiabatic Flame Temperature:</b> Currently not available</p> <p><b>4.11 Stoichiometric Air to Fuel Ratio:</b> Not pertinent</p> <p><b>4.12 Flame Temperature:</b> Currently not available</p> <p><b>4.13 Combustion Molar Ratio (Reactant to Product):</b> Not pertinent</p> <p><b>4.14 Minimum Oxygen Concentration for Combustion (MOCC):</b> Not listed</p>	<p><b>7.1 Grades of Purity:</b> Composition varies widely with the refinery operation involved.</p> <p><b>7.2 Storage Temperature:</b> Ambient</p> <p><b>7.3 Inert Atmosphere:</b> No requirement</p> <p><b>7.4 Venting:</b> Open (flame arrester)</p> <p><b>7.5 IMO Pollution Category:</b> Currently not available</p> <p><b>7.6 Ship Type:</b> Currently not available</p> <p><b>7.7 Barge Hull Type:</b> Currently not available</p>									
<b>Keep people away. Avoid contact with liquid and vapor. Wear protective clothing. Call fire department. Notify local health and pollution control agencies. Protect water intakes.</b>				<b>8. HAZARD CLASSIFICATIONS</b>										
<b>Fire</b> Combustible. Extinguish with dry chemical, foam, or carbon dioxide.				<p><b>8.1 49 CFR Category:</b> Flammable liquid</p> <p><b>8.2 49 CFR Class:</b> 3</p> <p><b>8.3 49 CFR Package Group:</b> III</p> <p><b>8.4 Marine Pollutant:</b> Yes</p> <p><b>8.5 NFPA Hazard Classification:</b></p> <table> <thead> <tr> <th>Category</th> <th>Classification</th> </tr> </thead> <tbody> <tr> <td>Health Hazard (Blue).....</td> <td>0</td> </tr> <tr> <td>Flammability (Red).....</td> <td>2</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0</td> </tr> </tbody> </table> <p><b>8.6 EPA Reportable Quantity:</b> Not listed.</p> <p><b>8.7 EPA Pollution Category:</b> Not listed.</p> <p><b>8.8 RCRA Waste Number:</b> Not listed</p> <p><b>8.9 EPA FWPCA List:</b> Not listed</p>	Category	Classification	Health Hazard (Blue).....	0	Flammability (Red).....	2	Instability (Yellow).....	0	<b>9. PHYSICAL &amp; CHEMICAL PROPERTIES</b>	
Category	Classification													
Health Hazard (Blue).....	0													
Flammability (Red).....	2													
Instability (Yellow).....	0													
<b>Exposure</b>  <b>LIQUID</b> Harmful if swallowed. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk. DO NOT INDUCE VOMITING.				<p><b>5. CHEMICAL REACTIVITY</b></p> <p><b>5.1 Reactivity with Water:</b> No reaction</p> <p><b>5.2 Reactivity with Common Materials:</b> No reaction</p> <p><b>5.3 Stability During Transport:</b> Stable</p> <p><b>5.4 Neutralizing Agents for Acids and Caustics:</b> Not pertinent</p> <p><b>5.5 Polymerization:</b> Not pertinent</p> <p><b>5.6 Inhibitor of Polymerization:</b> Not pertinent</p>	<p><b>9.1 Physical State at 15° C and 1 atm:</b> Liquid</p> <p><b>9.2 Molecular Weight:</b> Not pertinent</p> <p><b>9.3 Boiling Point at 1 atm:</b> 375-750°F = 190-399°C = 463-672°K</p> <p><b>9.4 Freezing Point:</b> Not pertinent</p> <p><b>9.5 Critical Temperature:</b> Not pertinent</p> <p><b>9.6 Critical Pressure:</b> Not pertinent</p> <p><b>9.7 Specific Gravity:</b> 0.848 16°C (liquid)</p> <p><b>9.8 Liquid Surface Tension:</b> (est.) 25 dynes/cm = 0.025 N/m at 20°C</p> <p><b>9.9 Liquid Water Interfacial Tension:</b> (est.) 50 dynes/cm = 0.05 N/m at 20°C</p> <p><b>9.10 Vapor (Gas) Specific Gravity:</b> 3.4</p> <p><b>9.11 Ratio of Specific Heats of Vapor (Gas):</b> Not pertinent</p> <p><b>9.12 Latent Heat of Vaporization:</b> Not pertinent</p> <p><b>9.13 Heat of Combustion:</b> -18,400 Btu/lb = -10,200 cal/g = 428 X 10³ J/kg</p> <p><b>9.14 Heat of Decomposition:</b> Not pertinent</p> <p><b>9.15 Heat of Solution:</b> Not pertinent</p> <p><b>9.16 Heat of Polymerization:</b> Not pertinent</p> <p><b>9.17 Heat of Fusion:</b> Currently not available</p> <p><b>9.18 Limiting Value:</b> Currently not available</p> <p><b>9.19 Reid Vapor Pressure:</b> Currently not available</p>									
<b>Water Pollution</b>  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. Notify operators of nearby water intakes.				<b>6. WATER POLLUTION</b>										
<b>1. CORRECTIVE RESPONSE ACTIONS</b> Stop discharge Contain Collection Systems: Skim Chemical and Physical Treatment: Burn; Absorb Clean shore line Salvage waterfowl		<b>2. CHEMICAL DESIGNATIONS</b> <b>2.1 CG Compatibility Group:</b> 33; Miscellaneous Hydrocarbon Mixtures <b>2.2 Formula:</b> Not pertinent (mixture) <b>2.3 IMO/UN Designation:</b> 3.3/1202 (gas oil) <b>2.4 DOT ID No.:</b> 1202 <b>2.5 CAS Registry No.:</b> Currently not available <b>2.6 NAERG Guide No.:</b> 128 <b>2.7 Standard Industrial Trade Classification:</b> 33430												
<b>3. HEALTH HAZARDS</b>														
<p><b>3.1 Personal Protective Equipment:</b> Protective goggles, gloves.</p> <p><b>3.2 Symptoms Following Exposure:</b> INHALATION: causes irritation of upper respiratory tract; stimulation, then depression; dizziness, headache, incoordination, anesthesia, coma, respiratory arrest; irregular heartbeat is a complication. ASPIRATION: causes severe coughing, gagging, distress, rapid development of pulmonary edema. INGESTION: causes irritation of throat and stomach; stimulation, then depression.</p> <p><b>3.3 Treatment of Exposure:</b> Get medical attention. INHALATION: maintain respiration; administer oxygen if needed. ASPIRATION: enforce bed rest and administer oxygen. INGESTION: give victim water or milk; do NOT induce vomiting; guard against aspiration into lungs. EYES: wash with copious quantity of water. SKIN: remove by wiping, then wash with soap and water.</p> <p><b>3.4 TLV-TWA:</b> Not listed.</p> <p><b>3.5 TLV-STEL:</b> Not listed.</p> <p><b>3.6 TLV-Ceiling:</b> Not listed.</p> <p><b>3.7 Toxicity by Ingestion:</b> Grade 2; LD<sub>50</sub> = 0.5 to 5 g/kg</p> <p><b>3.8 Toxicity by Inhalation:</b> Currently not available.</p> <p><b>3.9 Chronic Toxicity:</b> None</p> <p><b>3.10 Vapor (Gas) Irritant Characteristics:</b> Vapors cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.</p> <p><b>3.11 Liquid or Solid Characteristics:</b> Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of skin.</p> <p><b>3.12 Odor Threshold:</b> 0.25 ppm</p> <p><b>3.13 IDLH Value:</b> Not listed.</p> <p><b>3.14 OSHA PEL-TWA:</b> Not listed.</p> <p><b>3.15 OSHA PEL-STEL:</b> Not listed.</p> <p><b>3.16 OSHA PEL-Ceiling:</b> Not listed.</p> <p><b>3.17 EPA AEGL:</b> Not listed</p>	<b>6.1 Aquatic Toxicity:</b> 90 ppm/24 hr/juvenile shad/TL <sub>n</sub> /fresh water 91 ppm/24 hr/juvenile shad/TL <sub>n</sub> /salt water		<b>6.2 Waterfowl Toxicity:</b> Currently not available		<b>6.3 Biological Oxygen Demand (BOD):</b> 8%; 5 days									
<p><b>6.4 Food Chain Concentration Potential:</b> None</p> <p><b>6.5 GESAMP Hazard Profile:</b> Not listed</p>														
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	53.860	35	0.421	0	0.927	100	2.750
34	53.790	40	0.423	10	0.925		
36	53.720	45	0.426	20	0.923		
38	53.650	50	0.428	30	0.921		
40	53.580	55	0.431	40	0.919		
42	53.510	60	0.433	50	0.917		
44	53.440	65	0.435	60	0.915		
46	53.380	70	0.438	70	0.913		
48	53.310	75	0.440	80	0.911		
50	53.240	80	0.443	90	0.909		
52	53.170	85	0.445	100	0.907		
54	53.100	90	0.448	110	0.905		
56	53.030	95	0.450	120	0.903		
58	52.960	100	0.453	130	0.901		
60	52.890	105	0.455	140	0.899		
62	52.820			150	0.897		
64	52.750			160	0.895		
66	52.680			170	0.893		
68	52.610			180	0.891		
70	52.540			190	0.889		
72	52.470			200	0.887		
74	52.400			210	0.885		
76	52.340						
78	52.270						
80	52.200						
82	52.130						

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