

# OCTANOL

OTA

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b>		Thick liquid	Colorless	Sweet odor
Alcohol C-8 Heptylcarbinol 1-Octanol Octyl alcohol		Floats on water.		
<p>Keep people away. Call fire department. Avoid contact with liquid. Notify local health and pollution control agencies. Protect water intakes.</p>				
<b>Fire</b>	Combustible. Extinguish with dry chemical, foam, or carbon dioxide. Cool exposed containers with water.			
<b>Exposure</b>	CALL FOR MEDICAL AID.  LIQUID Irritating to skin. Will burn eyes. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water.			
<b>Water Pollution</b>	Effect of low concentrations on aquatic life is unknown. 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

Stop discharge  
Contain  
Collection Systems: Skim  
Chemical and Physical Treatment:  
Absorb  
Clean shore line  
Salvage waterfowl

### 2. CHEMICAL DESIGNATIONS

2.1 **CG Compatibility Group:** 20; Alcohol, glycol  
2.2 **Formula:** C<sub>8</sub>H<sub>17</sub>OH  
2.3 **IMO/UN Designation:** Not listed  
2.4 **DOT ID No.:** Not listed  
2.5 **CAS Registry No.:** 111-87-5  
2.6 **NAERG Guide No.:** Not listed  
2.7 **Standard Industrial Trade Classification:** 51214

### 3. HEALTH HAZARDS

3.1 **Personal Protective Equipment:** Chemical gloves and chemical goggles.  
3.2 **Symptoms Following Exposure:** Irritates skin and eyes.  
3.3 **Treatment of Exposure:** Flush with copious amounts of 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 1; oral rat LD<sub>50</sub> > 3.2 g/kg  
3.8 **Toxicity by Inhalation:** Currently not available.  
3.9 **Chronic Toxicity:** None  
3.10 **Vapor (Gas) Irritant Characteristics:** Vapors are nonirritating to the eyes and throat.  
3.11 **Liquid or Solid Characteristics:** No appreciable hazard. Practically harmless to the skin.  
3.12 **Odor Threshold:** 0.49 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

### 4. FIRE HAZARDS

4.1 **Flash Point:** 178°F C.C.  
4.2 **Flammable Limits in Air:** Currently not available  
4.3 **Fire Extinguishing Agents:** Foam, carbon dioxide, or dry chemical  
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:** 3.7 mm/min. (approx.)  
4.10 **Adiabatic Flame Temperature:** Currently not available  
4.11 **Stoichiometric Air to Fuel Ratio:** 57.1 (calc.)  
4.12 **Flame Temperature:** Currently not available  
4.13 **Combustion Molar Ratio (Reactant to Product):** 17.0 (calc.)  
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:** Currently not available  
6.2 **Waterfowl Toxicity:** Currently not available  
6.3 **Biological Oxygen Demand (BOD):** 109%, 5 days  
6.4 **Food Chain Concentration Potential:** None  
6.5 **GESAMP Hazard Profile:**  
Bioaccumulation: T  
Damage to living resources: 2  
Human Oral hazard: 1  
Human Contact hazard: O  
Reduction of amenities: X

### 7. SHIPPING INFORMATION

7.1 **Grades of Purity:** Currently not available  
7.2 **Storage Temperature:** Ambient  
7.3 **Inert Atmosphere:** No requirement  
7.4 **Venting:** Open (flame arrester)  
7.5 **IMO Pollution Category:** C  
7.6 **Ship Type:** 3  
7.7 **Barge Hull Type:** Currently not available

### 8. HAZARD CLASSIFICATIONS

8.1 **49 CFR Category:** Not listed  
8.2 **49 CFR Class:** Not pertinent  
8.3 **49 CFR Package Group:** Not listed.  
8.4 **Marine Pollutant:** No  
8.5 **NFPA Hazard Classification:**

Category	Classification
Health Hazard (Blue).....	1
Flammability (Red).....	2
Instability (Yellow).....	0

8.6 **EPA Reportable Quantity:** Not listed.  
8.7 **EPA Pollution Category:** Not listed.  
8.8 **RCRA Waste Number:** Not listed  
8.9 **EPA FWPCA List:** Not listed

### 9. PHYSICAL & CHEMICAL PROPERTIES

9.1 **Physical State at 15° C and 1 atm:** Liquid  
9.2 **Molecular Weight:** 130.23  
9.3 **Boiling Point at 1 atm:** 383°F = 195°C = 468°K  
9.4 **Freezing Point:** 5°F = -15°C = 258°K  
9.5 **Critical Temperature:** 725.0°F = 385°C = 658.2°K  
9.6 **Critical Pressure:** 400 psia = 27 atm = 2.7 MN/m<sup>2</sup>  
9.7 **Specific Gravity:** 0.829 at 20°C (liquid)  
9.8 **Liquid Surface Tension:** 27.5 dynes/cm = 0.0275 N/m at 20°C  
9.9 **Liquid Water Interfacial Tension:** 8.52 dynes/cm = 0.00852 N/m at 20°C  
9.10 **Vapor (Gas) Specific Gravity:** Not pertinent  
9.11 **Ratio of Specific Heats of Vapor (Gas):** 1.044  
9.12 **Latent Heat of Vaporization:** 176 Btu/lb = 97.5 cal/g = 4.08 X 10<sup>5</sup> J/kg  
9.13 **Heat of Combustion:** -16,130 Btu/lb = -8,963 cal/g = -375.3 X 10<sup>5</sup> 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
35	52.660	68	0.499	95	1.113	55	11.840
40	52.520	69	0.499	100	1.110	60	10.630
45	52.380	70	0.499	105	1.107	65	9.555
50	52.240	71	0.499	110	1.104	70	8.609
55	52.100	72	0.499	115	1.101	75	7.772
60	51.960	73	0.499	120	1.098	80	7.029
65	51.820	74	0.499	125	1.095	85	6.369
70	51.680	75	0.499	130	1.092	90	5.781
75	51.540	76	0.499	135	1.089	95	5.257
80	51.400	77	0.499	140	1.086	100	4.789
85	51.260	78	0.499	145	1.083	105	4.369
90	51.120	79	0.499	150	1.080	110	3.993
95	50.980	80	0.499	155	1.077	115	3.654
100	50.840	81	0.499	160	1.074	120	3.350
105	50.700	82	0.499	165	1.071	125	3.075
110	50.560	83	0.499	170	1.068	130	2.827
115	50.420	84	0.499			135	2.603
120	50.280	85	0.499			140	2.400
125	50.130						
130	49.990						
135	49.850						
140	49.710						

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
68	0.600	80	0.002	80	0.00004	0	0.328
		100	0.005	100	0.00011	25	0.342
		120	0.013	120	0.00028	50	0.355
		140	0.032	140	0.00065	75	0.369
		160	0.070	160	0.00138	100	0.382
		180	0.144	180	0.00273	125	0.396
		200	0.275	200	0.00507	150	0.409
		220	0.497	220	0.00888	175	0.422
		240	0.854	240	0.01481	200	0.435
		260	1.404	260	0.02367	225	0.447
		280	2.219	280	0.03639	250	0.460
		300	3.388	300	0.05410	275	0.472
		320	5.016	320	0.07805	300	0.485
		340	7.225	340	0.10960	325	0.497
		360	10.150	360	0.15030	350	0.509
		380	13.950	380	0.20160	375	0.521
		400	18.790	400	0.26520	400	0.532
		420	24.850	420	0.34280	425	0.544
		440	32.320	440	0.43590	450	0.555
		460	41.400	460	0.54620	475	0.567
		480	52.300	480	0.67530	500	0.578
						525	0.589
						550	0.600
						575	0.611
						600	0.621