

ISOOCTYL ALCOHOL

IOA

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Dimethyl-1-hexanols 6-Methyl-1-heptanol Oxo octyl alcohol		Liquid	Colorless	Mild odor
		Floats on water.		
<p style="color: red;">Call fire department. Avoid contact with liquid. Notify local health and pollution control agencies.</p>				
Fire	Combustible. Extinguish with dry chemical, foam, water, or carbon dioxide. Cool exposed containers with water.			
Exposure	CALL FOR MEDICAL AID. LIQUID Irritating to skin and eyes. Harmful if swallowed. Remove contaminated clothing. 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.			
Water Pollution	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: (CH ₂) ₇ CH(CH ₂) ₇ CH ₂ OH 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: Not listed 2.5 CAS Registry No.: 26952-21-6 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 51214
3. HEALTH HAZARDS	
3.1 Personal Protective Equipment: Air-supplied mask in confined areas; plastic gloves; goggles; eye bath and safety shower. 3.2 Symptoms Following Exposure: Inhalation hazard slight. Skin contact results in moderate irritation. Liquid contact with eyes causes severe irritation and possible eye damage. 3.3 Treatment of Exposure: Remove to fresh air. Flush skin and eye contact area at once for at least 15 min. Get medical care for eyes. 3.4 TLV-TWA: 50 ppm 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 (lab animals) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 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: Currently not available 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:** 180°F O.C.
- 4.2 **Flammable Limits in Air:** 0.9% (calc.) 5.7% (est.)
- 4.3 **Fire Extinguishing Agents:** Water, 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:** 530°F (est.)
- 4.8 **Electrical Hazards:** Not pertinent
- 4.9 **Burning Rate:** Currently not available
- 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):** Currently not available
- 6.4 **Food Chain Concentration Potential:** None
- 6.5 **GESAMP Hazard Profile:** Not listed

7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** 99+% (mixed isomers)
- 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).....	0
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:** 130.22
- 9.3 **Boiling Point at 1 atm:** 367°F = 186°C = 459°K
- 9.4 **Freezing Point:** <212°F = <100°C = <373°K
- 9.5 **Critical Temperature:** Not pertinent
- 9.6 **Critical Pressure:** Not pertinent
- 9.7 **Specific Gravity:** 0.832 at 20°C (liquid)
- 9.8 **Liquid Surface Tension:** 29.5 dynes/cm = 0.0295 N/m at 20°C
- 9.9 **Liquid Water Interfacial Tension:** (est.) 40 dynes/cm = 0.04 N/m at 20°C
- 9.10 **Vapor (Gas) Specific Gravity:** Not pertinent
- 9.11 **Ratio of Specific Heats of Vapor (Gas):** (est.) 1.040
- 9.12 **Latent Heat of Vaporization:** (est.) 140 Btu/lb = 77 cal/g = 3.2 X 10⁵ J/kg
- 9.13 **Heat of Combustion:** (est.) -17,400 Btu/lb = -9650 cal/g = -404 X 10⁵ 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:** 0.02 psia

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
52	52.490	122	0.790	50	1.040	68	10.000
54	52.420			52	1.040		
56	52.350			54	1.040		
58	52.280			56	1.040		
60	52.210			58	1.040		
62	52.140			60	1.040		
64	52.070			62	1.040		
66	52.010			64	1.040		
68	51.940			66	1.040		
70	51.870			68	1.040		
72	51.800			70	1.040		
74	51.730			72	1.040		
76	51.660			74	1.040		
78	51.590			76	1.040		
80	51.520			78	1.040		
82	51.450			80	1.040		
84	51.380			82	1.040		
86	51.310			84	1.040		

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	0.070	60	0.004	60	0.00008	100	0.415
		80	0.008	80	0.00019	120	0.425
		100	0.018	100	0.00040	140	0.434
		120	0.038	120	0.00080	160	0.444
		140	0.076	140	0.00153	180	0.453
		160	0.143	160	0.00280	200	0.462
		180	0.260	180	0.00493	220	0.471
		200	0.456	200	0.00839	240	0.480
		220	0.774	220	0.01382	260	0.488
		240	1.274	240	0.02210	280	0.497
		260	2.041	260	0.03440	300	0.505
		280	3.185	280	0.05224	320	0.513
		300	4.857	300	0.07756	340	0.521
		320	7.247	320	0.11280	360	0.528
		340	10.600	340	0.16080	380	0.536
		360	15.220	360	0.22520	400	0.543
		380	21.470	380	0.31020	420	0.550
						440	0.558
						460	0.564
						480	0.571
						500	0.578
						520	0.584
						540	0.590
						560	0.596
						580	0.602
						600	0.608