

# ISODECYL ALCOHOL

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## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b>	Liquid	Colorless	Mild alcohol odor
	Floats on water.		
	<p>Keep people away. Avoid contact with liquid.                  Wear goggles and rubber overclothing (including gloves).                  Call fire department.                  Notify local health and pollution control agencies.</p>		
<b>Fire</b>	Combustible. Extinguish with dry chemical, alcohol foam, or carbon dioxide. Water may be ineffective on fire.		
<b>Exposure</b>	CALL FOR MEDICAL AID.  LIQUID Will burn skin and eyes. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.		
<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.		

<p><b>1. CORRECTIVE RESPONSE ACTIONS</b></p> Stop discharge Contain Collection Systems: Skim Chemical and Physical Treatment: Absorb Clean shore line Salvage waterfowl	<p><b>2. CHEMICAL DESIGNATIONS</b></p> <p>2.1 <b>CG Compatibility Group:</b> 20; Alcohol, glycol</p> <p>2.2 <b>Formula:</b> C<sub>10</sub>H<sub>21</sub>OH</p> <p>2.3 <b>IMO/UN Designation:</b> Not listed</p> <p>2.4 <b>DOT ID No.:</b> Not listed</p> <p>2.5 <b>CAS Registry No.:</b> Currently not available</p> <p>2.6 <b>NAERG Guide No.:</b> Not listed</p> <p>2.7 <b>Standard Industrial Trade Classification:</b> 51219</p>
<p><b>3. HEALTH HAZARDS</b></p> <p>3.1 <b>Personal Protective Equipment:</b> Chemical goggles.</p> <p>3.2 <b>Symptoms Following Exposure:</b> Direct contact with skin can produce irritation.</p> <p>3.3 <b>Treatment of Exposure:</b> Wash affected area with water for 15 min.</p> <p>3.4 <b>TLV-TWA:</b> Not listed.</p> <p>3.5 <b>TLV-STEL:</b> Not listed.</p> <p>3.6 <b>TLV-Ceiling:</b> Not listed.</p> <p>3.7 <b>Toxicity by Ingestion:</b> Currently not available</p> <p>3.8 <b>Toxicity by Inhalation:</b> Currently not available.</p> <p>3.9 <b>Chronic Toxicity:</b> Currently not available</p> <p>3.10 <b>Vapor (Gas) Irritant Characteristics:</b> Vapors are non-irritating to the eyes and throat.</p> <p>3.11 <b>Liquid or Solid Characteristics:</b> Causes smarting of the skin and first-degree burns on short exposure; may cause secondary burns on long exposure.</p> <p>3.12 <b>Odor Threshold:</b> Currently not available</p> <p>3.13 <b>IDLH Value:</b> Not listed.</p> <p>3.14 <b>OSHA PEL-TWA:</b> Not listed.</p> <p>3.15 <b>OSHA PEL-STEL:</b> Not listed.</p> <p>3.16 <b>OSHA PEL-Ceiling:</b> Not listed.</p> <p>3.17 <b>EPA AEGL:</b> Not listed</p>	

## 4. FIRE HAZARDS

- 4.1 **Flash Point:** 220°F O.C.
- 4.2 **Flammable Limits in Air:** Currently not available
- 4.3 **Fire Extinguishing Agents:** Alcohol foam, dry chemicals or carbon dioxide
- 4.4 **Fire Extinguishing Agents Not to Be Used:** Water or foam may cause frothing
- 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:** Currently not available
- 4.10 **Adiabatic Flame Temperature:** Currently not available
- 4.11 **Stoichiometric Air to Fuel Ratio:** 71.4 (calc.)
- 4.12 **Flame Temperature:** Currently not available
- 4.13 **Combustion Molar Ratio (Reactant to Product):** 21.0 (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:** Technical: mixed isomers
- 7.2 **Storage Temperature:** Ambient
- 7.3 **Inert Atmosphere:** No requirement
- 7.4 **Venting:** Open (flame arrester)
- 7.5 **IMO Pollution Category:** B
- 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:** Not listed
- 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:** 158.29
- 9.3 **Boiling Point at 1 atm:** 428°F = 220°C = 493°K
- 9.4 **Freezing Point:** <140°F = <60°C = <333°K
- 9.5 **Critical Temperature:** Not pertinent
- 9.6 **Critical Pressure:** Not pertinent
- 9.7 **Specific Gravity:** 0.841 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.) 1.032
- 9.12 **Latent Heat of Vaporization:** (est.) 120 Btu/lb = 67 cal/g = 2.8 X 10<sup>5</sup> J/kg
- 9.13 **Heat of Combustion:** Currently not available
- 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
34	53.680	85	0.555	50	1.040	50	9.343
36	53.610	90	0.561	51	1.040	51	9.088
38	53.540	95	0.567	52	1.040	52	8.841
40	53.470	100	0.573	53	1.040	53	8.602
42	53.400	105	0.579	54	1.040	54	8.370
44	53.330	110	0.584	55	1.040	55	8.145
46	53.260	115	0.590	56	1.040	56	7.927
48	53.190	120	0.596	57	1.040	57	7.716
50	53.120	125	0.602	58	1.040	58	7.511
52	53.050	130	0.608	59	1.040	59	7.312
54	52.980	135	0.614	60	1.040	60	7.119
56	52.910	140	0.620	61	1.040	61	6.932
58	52.840	145	0.626	62	1.040	62	6.751
60	52.780	150	0.632	63	1.040	63	6.575
62	52.710			64	1.040	64	6.404
64	52.640			65	1.040	65	6.239
66	52.570			66	1.040	66	6.078
68	52.500			67	1.040	67	5.922
70	52.430			68	1.040	68	5.770
72	52.360			69	1.040	69	5.623
74	52.290			70	1.040	70	5.481
76	52.220			71	1.040	71	5.342
78	52.150			72	1.040	72	5.207
80	52.080			73	1.040	73	5.077
82	52.010			74	1.040	74	4.950
84	51.940			75	1.040	75	4.826

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	0.010	220	0.204	220	0.00443	100	0.416
		230	0.271	230	0.00579	120	0.426
		240	0.357	240	0.00753	140	0.436
		250	0.467	250	0.00971	160	0.445
		260	0.606	260	0.01242	180	0.455
		270	0.781	270	0.01579	200	0.464
		280	1.000	280	0.01994	220	0.473
		290	1.272	290	0.02502	240	0.482
		300	1.607	300	0.03119	260	0.491
		310	2.018	310	0.03867	280	0.499
		320	2.520	320	0.04766	300	0.507
		330	3.128	330	0.05842	320	0.516
		340	3.863	340	0.07124	340	0.524
		350	4.746	350	0.08643	360	0.531
		360	5.801	360	0.10440	380	0.539
		370	7.056	370	0.12540	400	0.547
		380	8.543	380	0.15000	420	0.554
		390	10.300	390	0.17870	440	0.561
		400	12.360	400	0.21190	460	0.568
						480	0.575
						500	0.581
						520	0.588
						540	0.594
						560	0.600
						580	0.606
						600	0.612