

# ETHOXYLATED DODECANOL

EOD

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Ethoxylated dodecyl alcohol Ethoxylated lauryl alcohol Poly (oxyethyl) dodecyl ether Poly (oxyethyl) lauryl ether Tergitol nonionic TMN		Oily liquid      Colorless to yellow      Pleasant odor  Mixes slowly with water. Freezing point is 61°F.
Avoid contact with liquid. Call fire department. Notify local health and pollution control agencies. Protect water intakes.		
<b>Fire</b>	Combustible. Extinguish with water, foam, dry chemical, or carbon dioxide.	
<b>Exposure</b>	CALL FOR MEDICAL AID.  LIQUID Irritating to skin. Will burn eyes. Harmful if swallowed. 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.	
<b>Water Pollution</b>	Effect of low concentration on aquatic life is unknown. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.	

<b>1. CORRECTIVE RESPONSE ACTIONS</b> Dilute and disperse Stop discharge	<b>2. CHEMICAL DESIGNATIONS</b> <b>2.1 CG Compatibility Group:</b> 20; Alcohol, glycol <b>2.2 Formula:</b> C <sub>12</sub> H <sub>25</sub> O(CH <sub>2</sub> CH <sub>2</sub> O) <sub>n</sub> CH <sub>2</sub> CH <sub>2</sub> OH where n = 6-10 (average) <b>2.3 IMO/UN Designation:</b> Not listed <b>2.4 DOT ID No.:</b> Not listed <b>2.5 CAS Registry No.:</b> Currently not available <b>2.6 NAERG Guide No.:</b> Not listed <b>2.7 Standard Industrial Trade Classification:</b> 51219
<b>3. HEALTH HAZARDS</b> <b>3.1 Personal Protective Equipment:</b> Plastic gloves, goggles. <b>3.2 Symptoms Following Exposure:</b> Liquid causes eye injury and de-fats the skin, causing irritation. <b>3.3 Treatment of Exposure:</b> Flush eyes with water for at least 15 min. Wash skin well with water. Get medical attention. <b>3.4 TLV-TWA:</b> Not listed. <b>3.5 TLV-STEL:</b> Not listed. <b>3.6 TLV-Ceiling:</b> Not listed. <b>3.7 Toxicity by Ingestion:</b> Grade 1; LD <sub>50</sub> = 5-15 g/kg (rat) <b>3.8 Toxicity by Inhalation:</b> Currently not available. <b>3.9 Chronic Toxicity:</b> Currently not available <b>3.10 Vapor (Gas) Irritant Characteristics:</b> None <b>3.11 Liquid or Solid Characteristics:</b> Liquid causes eye injury. Contact with skin may cause irritation. <b>3.12 Odor Threshold:</b> Currently not available <b>3.13 IDLH Value:</b> Not listed. <b>3.14 OSHA PEL-TWA:</b> Not listed. <b>3.15 OSHA PEL-STEL:</b> Not listed. <b>3.16 OSHA PEL-Ceiling:</b> Not listed. <b>3.17 EPA AEGL:</b> Not listed	

## 4. FIRE HAZARDS

- 4.1 Flash Point: 470°F O.C.
- 4.2 Flammable Limits in Air: Not pertinent
- 4.3 Fire Extinguishing Agents: Dry chemical, carbon dioxide, or alcohol foam.
- 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: Currently not available
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichiometric Air to Fuel Ratio: Not pertinent
- 4.12 Flame Temperature: Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent
- 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: Usually 100%
- 7.2 Storage Temperature: Ambient
- 7.3 Inert Atmosphere: No requirement
- 7.4 Venting: Open (flame arrester)
- 7.5 IMO Pollution Category: Currently not available
- 7.6 Ship Type: Currently not available
- 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: 450-626
- 9.3 Boiling Point at 1 atm: Very high
- 9.4 Freezing Point: 61°F = 16°C = 289°K
- 9.5 Critical Temperature: Not pertinent
- 9.6 Critical Pressure: Not pertinent
- 9.7 Specific Gravity: 1.02 at 20°C (liquid)
- 9.8 Liquid Surface Tension: Not pertinent
- 9.9 Liquid Water Interfacial Tension: Not pertinent
- 9.10 Vapor (Gas) Specific Gravity: Not pertinent
- 9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
- 9.12 Latent Heat of Vaporization: Not pertinent
- 9.13 Heat of Combustion: (est.) -11,00 Btu/lb = -6,200 cal/g = -260 X 10<sup>6</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
61	63.290	68	0.478		N O T		N O T
62	63.260	69	0.478				
63	63.220	70	0.478				
64	63.190	71	0.478				
65	63.150	72	0.478		P E R T I N E N T		P E R T I N E N T
66	63.120	73	0.478				
67	63.080	74	0.478				
68	63.050	75	0.478				
69	63.010	76	0.478				
70	62.980	77	0.478				
71	62.940	78	0.478				
72	62.910	79	0.478				
73	62.870	80	0.478				
74	62.840	81	0.478				
75	62.800	82	0.478				
76	62.770	83	0.478				
77	62.730	84	0.478				
78	62.700	85	0.478				
79	62.670						
80	62.630						
81	62.600						
82	62.560						
83	62.530						
84	62.490						
85	62.460						
86	62.420						

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	10.000		N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T