

LACTONITRILE SOLUTION (80% OR LESS)

LNI

CAUTIONARY RESPONSE INFORMATION		
Common Synonyms Acetocyanohydrin 2-Hydroxypropionitrile	Liquid	Straw colored
Wear full impervious protective clothing and approved respirator. Notify local health and pollution control agencies.		
Fire		May be combustible, depending upon concentration. Wear full protective clothing with self-contained breathing apparatus. Extinguish fire with dry chemical, alcohol foam, carbon dioxide. Use water spray to cool exposed containers.
Exposure		CALL FOR MEDICAL AID. POISON. VAPOR Move victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. LIQUID Remove contaminated clothing and shoes. Flush affected areas with water. IF IN EYES: hold eyelids open and flush with plenty of water.
Water Pollution		Effect of low concentrations 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.

1. CORRECTIVE RESPONSE ACTIONS	2. CHEMICAL DESIGNATIONS	3. HEALTH HAZARDS
Stop discharge	<p>2.1 CG Compatibility Group: 37; Nitriles</p> <p>2.2 Formula: CH₂CH(OH)CN</p> <p>2.3 IMO/UN Designation: Currently not available</p> <p>2.4 DOT ID No.: Not listed.</p> <p>2.5 CAS Registry No.: 78-97-7</p> <p>2.6 NAERG Guide No.: Not listed</p> <p>2.7 Standard Industrial Trade Classification: 51484</p>	<p>3.1 Personal Protective Equipment: Full impervious protective clothing, including boots and gloves. Where splashing is possible wear full face shield or chemical safety goggles. Use approved respirator to protect against vapors.</p> <p>3.2 Symptoms Following Exposure: Poison. Toxic by inhalation, ingestion, or skin absorption.</p> <p>3.3 Treatment of Exposure: Get medical attention. INHALATION: Remove to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. EYES: Flush with water for at least 15 min., lifting lids occasionally. SKIN: Remove contaminated clothing and shoes. Flush with water.</p> <p>3.4 TLV-TWA: Not listed.</p> <p>3.5 TLV-STEL: Not listed.</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Grade 3; oral rat LD₅₀ = 87 mg/kg.</p> <p>3.8 Toxicity by Inhalation: Currently not available.</p> <p>3.9 Chronic Toxicity: Currently not available</p> <p>3.10 Vapor (Gas) Irritant Characteristics: Vapors cause moderate irritation such that personnel will find high concentrations unpleasant. The effect is temporary.</p> <p>3.11 Liquid or Solid Characteristics: Causes smarting of the skin and first-degree burns on short exposure; may cause second-degree burns on long exposure.</p> <p>3.12 Odor Threshold: Currently not available.</p> <p>3.13 IDLH Value: Not listed.</p> <p>3.14 OSHA PEL-TWA: Not listed.</p> <p>3.15 OSHA PEL-STEL: Not listed.</p> <p>3.16 OSHA PEL-Ceiling: Not listed.</p> <p>3.17 EPA AEGL: Not listed</p>

4. FIRE HAZARDS	7. SHIPPING INFORMATION
4.1 Flash Point: Currently not available	7.1 Grades of Purity: Technical grades.
4.2 Flammable Limits in Air: Currently not available	7.2 Storage Temperature: Ambient.
4.3 Fire Extinguishing Agents: Dry chemical, alcohol foam, or carbon dioxide.	7.3 Inert Atmosphere: No requirement.
4.4 Fire Extinguishing Agents Not to Be Used: Water.	7.4 Venting: Pressure vacuum valve.
4.5 Special Hazards of Combustion Products: Irritating vapors and toxic gases, such as nitrogen oxides and carbon monoxide, may be formed when involved in fire.	7.5 IMO Pollution Category: B
4.6 Behavior in Fire: Currently not available	7.6 Ship Type: 2
4.7 Auto Ignition Temperature: Currently not available	7.7 Barge Hull Type: Currently not available
4.8 Electrical Hazards: Not listed.	8. HAZARD CLASSIFICATIONS
4.9 Burning Rate: Currently not available	8.1 49 CFR Category: Not listed.
4.10 Adiabatic Flame Temperature: Currently not available	8.2 49 CFR Class: Not pertinent.
4.11 Stoichiometric Air to Fuel Ratio: 22.6 (calc. for pure material)	8.3 49 CFR Package Group: Not listed.
4.12 Flame Temperature: Currently not available	8.4 Marine Pollutant: No
4.13 Combustion Molar Ratio (Reactant to Product): 6.5 (calc. for pure material)	8.5 NFPA Hazard Classification:
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	Category Classification Health Hazard (Blue)..... 4 Flammability (Red)..... 2 Instability (Yellow)..... 1
5. CHEMICAL REACTIVITY	8.6 EPA Reportable Quantity: Not listed.
5.1 Reactivity with Water: No reaction.	8.7 EPA Pollution Category: Not listed.
5.2 Reactivity with Common Materials: Evolves hydrocyanic acid in presence of alkali.	8.8 RCRA Waste Number: Not listed
5.3 Stability During Transport: Stable.	8.9 EPA FWCNA List: Not listed
5.4 Neutralizing Agents for Acids and Caustics: Not pertinent.	9. PHYSICAL & CHEMICAL PROPERTIES
5.5 Polymerization: Will not polymerize.	9.1 Physical State at 15° C and 1 atm: Liquid
5.6 Inhibitor of Polymerization: Not pertinent.	9.2 Molecular Weight: 71.09
6. WATER POLLUTION	9.3 Boiling Point at 1 atm: Currently not available
6.1 Aquatic Toxicity: Currently not available	9.4 Freezing Point: Currently not available
6.2 Waterfowl Toxicity: Currently not available	9.5 Critical Temperature: Currently not available
6.3 Biological Oxygen Demand (BOD): Currently not available	9.6 Critical Pressure: Currently not available
6.4 Food Chain Concentration Potential: Currently not available	9.7 Specific Gravity: Currently not available
6.5 GESAMP Hazard Profile: Bioaccumulation: 0 Damage to living resources: 2 Human Oral hazard: 2 Human Contact hazard: II Reduction of amenities: XX	9.8 Liquid Surface Tension: Currently not available
	9.9 Liquid Water Interfacial Tension: Currently not available
	9.10 Vapor (Gas) Specific Gravity: Currently not available
	9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available
	9.12 Latent Heat of Vaporization: Currently not available
	9.13 Heat of Combustion: Currently not available
	9.14 Heat of Decomposition: Currently not available
	9.15 Heat of Solution: Currently not available
	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
CURRENTLY NOT AVAILABLE			CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE

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
CURRENTLY NOT AVAILABLE			CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE