ETHYLENEDIAMINE TETRACETIC ACID

CAUTIONARY RESPONSE INFORMATION Common Synonyms Solid powder FDTA Endrate (Ethylenedinitrilo) tetraacetic acid Floats on water Ethylene bis (iminodiacetic acid) Tetrine acid Versene acid Notify local health and pollution control agencies Protect water intakes. Not flammable Fire CALL FOR MEDICAL AID. **Exposure** SOLID Irritating to skin and 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. Effect of low concentrations on aquatic life is unknown. Water Fouling to shoreline. Fouling to snoreurie. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes. **Pollution**

CORRECTIVE RESPONSE ACTIONS Stop discharge Contain Collection Systems: Skim Salvage waterfowl Clean shore line	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed. 2.2 Formula: (HOOCCHb)=NCHbCHbN(CHbCOOH)2 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: 9117 2.5 CAS Registry No.: 60-00-4 2.6 NAERG Guide No.: 171 2.7 Standard Industrial Trade Classification: 51372
3. HEALTH H	AZARDS
3.1 Personal Protective Equipment: Currently not av	railable
3.2 Symptoms Following Exposure: Currently not av	ailable
3.3 Treatment of Exposure: Currently not available	
3.4 TLV-TWA: Not listed.	

- 3.5 TLV-STEL: Not listed.
- 3.6 TLV-Ceiling: Not listed.
- 3.8 Toxicity by Inhalation: Currently not available.3.9 Chronic Toxicity: Currently not available
- 3.7 Toxicity by Ingestion: Grade 1; $LD_{50} = 5$ to 15 g/kg (as sodium or calcium salt)
- 3.10 Vapor (Gas) Irritant Characteristics: Not pertinent
- 3.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.
- 3.12 Odor Threshold: Odorless
- 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: Not flammable
- 4.2 Flammable Limits in Air: Not pertinent
- 4.3 Fire Extinguishing Agents: Not pertinent
- 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: Not pertinent 4.8 Electrical Hazards: Not pertinent
- 4.9 Burning Rate: Not pertinent
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichometric Air to Fuel Ratio: Not pertinent
- 4.12 Flame Temperature: Currently not
- 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent
- 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Nz diluent: 10.6%; CO2 diluent: 13.0%

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: 129 ppm/96 hr/catfish/tapwater
- 6.2 Waterfowl Toxicity: Currently not
- 6.3 Biological Oxygen Demand (BOD): 1%,
- 6.4 Food Chain Concentration Potential:
- 6.5 GESAMP Hazard Profile:
 Bioaccumulation: 0
 Damage to living resources: 0 Human Oral hazard: 1 Human Contact hazard: II Reduction of amenities: 0

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
- 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: 5000 pounds
- 8.7 EPA Pollution Category: D
- 8.8 RCRA Waste Number: Not listed
- 8.9 EPA FWPCA List: Yes

9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 Physical State at 15° C and 1 atm: Powder
- 9.2 Molecular Weight: 164
- 9.3 Boiling Point at 1 atm: Not pertinent
- 9.4 Freezing Point: Currently not available
- 9.5 Critical Temperature: Not pertinent
- 9.6 Critical Pressure: Not pertinent
- 9.7 Specific Gravity: 0.86 at 20°C (solid)
- 9.8 Liquid Surface Tension: Not pertinent
- 9.9 Liquid Water Interfacial Tension: Not
- 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: Not pertinent
- 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
	N O T		N O T		N O T		N O T
	. PERT-NEXT		PERTINENT		. PERT - NENT		. PERT-NEXT

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
77	0.500		N O T		N O T		N O T
			P E R T I N E N T		PERTINENT		PERTINENT