DIMETHYL GLUTARATE

CAUTIONARY RESPONSE INFORMATION Common Synonyms Avoid contact with liquid. Notify local health and pollution control agencies Combustible Water may be ineffective on fire Fire Wear self-contained breathing apparatus and prototive clothing. Extinguish with dry chemical, alcohol foam, or CO₂. Cool exposed containers with water. CALL FOR MEDICAL AID. **Exposure** VAPOR May be irritating. Move to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult give oxygen. LIQUID May be harmful by ingestion or skin absorption. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with Effect of low concentrations on aquatic life is unknown. Water Fouling to shoreline. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes. **Pollution**

1. CORRECTIVE RESPONSE ACTIONS

Collection Systems: Dredge

2. CHEMICAL DESIGNATIONS

- CG Compatibility Group: 34; Esters Formula: CH₃O₂OC(CH₂)₃CO₂CH₃
- IMO/UN Designation: Currently not available
 DOT ID No.: Not listed
 CAS Registry No.: 1119-40-0
 NAERG Guide No.: Not listed

- Standard Industrial Trade Classification: 51385

3. HEALTH HAZARDS

- 3.1 Personal Protective Equipment: Self-contained breathing apparatus, rubber boots and heavy rubber
- 3.2 Symptoms Following Exposure: May be harmful by inhalation, ingestion, or skin absorption. May cause irritation.
- cause imitation.

 3.3 Treatment of Exposure: INHALATION: Call for medical aid. Remove the victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. EYES: Flush immediately with copious amounts of water for at least 15 minutes. SKIN: Wash immediately with soap and copious amounts of water for at least 15 minutes.
- 3.4 TLV-TWA: Not listed.
- 3.5 TLV-STEL: Not listed.
- 3.6 TLV-Ceiling: Not listed.
- 3.7 Toxicity by Ingestion: Currently not available
- 3.8 Toxicity by Inhalation: Currently not available.
- 3.9 Chronic Toxicity: Currently not available
- 3.10 Vapor (Gas) Irritant Characteristics: Vapors cause slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary. 3.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may
- cause smarting and reddening 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
- 3.17 EPA AEGL: Not listed
- 3.16 OSHA PEL-Ceiling: Not listed

4. FIRE HAZARDS

- 4.1 Flash Point: 218°F C.C.
- **4.2 Flammable Limits in Air:** Currently not available
- 4.3 Fire Extinguishing Agents: Carbon dioxide, dry chemical, alcohol foam.
- 4.4 Fire Extinguishing Agents Not to Be Used: Currently not available
- 4.5 Special Hazards of Combustion
- 4.6 Behavior in Fire: Currently not available
- 4.7 Auto Ignition Temperature: Currently not
- 4.8 Electrical Hazards: Currently not
- 4.9 Burning Rate: Currently not available
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichometric Air to Fuel Ratio: 38.1
- 4.12 Flame Temperature: Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product): 13.0 (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: Will not occur
- 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: Currently not available
- GESAMP Hazard Profile: Bioaccumulation: 0

Damage to living resources: 2 Human Oral hazard: 0 Human Contact hazard: 1 Reduction of amenities: 0

7. SHIPPING INFORMATION

- 7.1 Grades of Purity: 98%
- 7.2 Storage Temperature: Ambient
- 7.3 Inert Atmosphere: Currently not available
- 7.4 Venting: Currently not available
- 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: 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: 160.17
- 9.3 Boiling Point at 1 atm: 199.4-203°F = 93-95°C = 366.2°K-368.2°K (at 13 mm Hg = .0171 atm)
- 9.4 Freezing Point: Currently not available
- 9.5 Critical Temperature: Currently not available
- 9.6 Critical Pressure: Currently not available
- 9.7 Specific Gravity: 1.087
- 9.8 Liquid Surface Tension: Currently not
- 9.9 Liquid Water Interfacial Tension: Currently
- 9.10 Vapor (Gas) Specific Gravity: 5.52
- 9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available
- 9.12 Latent Heat of Vaporization: Currently not
- 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:** Currently not available
- 9.17 Heat of Fusion: Currently not available
- 9.18 Limiting Value: Currently not available
- 9.19 Reid Vapor Pressure: Currently not

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
	C U R R E N T L Y N O T A V A I L A B L E		C U R R E N T L Y N O T A V A I L A B L E		CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVA-LABLE

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
	I N S O L U B L E		CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE	0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600	0.237 0.246 0.255 0.264 0.273 0.282 0.290 0.299 0.307 0.316 0.324 0.332 0.340 0.347 0.355 0.363 0.370 0.377 0.385 0.392 0.399 0.405 0.412 0.418 0.425