

DIMETHYL PHTHALATE

DTL

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Avolin DMP ENT 262 Fermine Methyl phthalate Mipax NTM Solvarone	Liquid Colorless to pale yellow Odorless Sinks in water.
Call fire department. Notify local health and pollution control agencies. Protect water intakes.	
Fire	Combustible Irritating gases may be produced when heated. Water may be ineffective on fire. Wear goggles and self-contained breathing apparatus. Extinguish with dry chemicals, foam, or carbon dioxide.
Exposure	LIQUID Not harmful
Water Pollution	Effect of low concentrations on aquatic life are not known. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of local water intakes.

1. CORRECTIVE RESPONSE ACTIONS Stop discharge Collection Systems: Pump; Dredge	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: 34; Esters 2.2 Formula: (C ₈ H ₈)(COOCH ₃) ₂ 2.3 IMO/UN Designation: Not Listed 2.4 DOT ID No.: Not Listed 2.5 CAS Registry No.: 131-11-3 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 51385
3. HEALTH HAZARDS	
3.1 Personal Protective Equipment: Rubber gloves; goggles or face shield. 3.2 Symptoms Following Exposure: Symptoms unlikely from any exposure. 3.3 Treatment of Exposure: INHALATION: Remove to fresh air. EYES: Flush with water. SKIN: Flush with water, wash well with soap and water. 3.4 TLV-TWA: 5 mg/m ³ 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 1; LD ₅₀ = 6.8 g/kg (rat) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 3.10 Vapor (Gas) Irritant Characteristics: Vapors are non-irritating to eyes and throat. 3.11 Liquid or Solid Characteristics: No appreciable hazard. Practically harmless to the skin. 3.12 Odor Threshold: Currently not available 3.13 IDLH Value: 2,000 mg/m ³ 3.14 OSHA PEL-TWA: 5 mg/m ³ 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:** 295°F C.C.
- 4.2 **Flammable Limits in Air:** 0.9-8.0%
- 4.3 **Fire Extinguishing Agents:** CO₂, dry chemicals, foam
- 4.4 **Fire Extinguishing Agents Not to Be Used:** Currently not available
- 4.5 **Special Hazards of Combustion Products:** Currently not available
- 4.6 **Behavior in Fire:** Currently not available
- 4.7 **Auto Ignition Temperature:** 915°F
- 4.8 **Electrical Hazards:** Currently not available
- 4.9 **Burning Rate:** Currently not available
- 4.10 **Adiabatic Flame Temperature:** Currently not available
- 4.11 **Stoichiometric Air to Fuel Ratio:** 50.0 (calc.)
- 4.12 **Flame Temperature:** Currently not available
- 4.13 **Combustion Molar Ratio (Reactant to Product):** 15.0 (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:** None
- 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
- 6.5 **GESAMP Hazard Profile:**
 Bioaccumulation: 0
 Damage to living resources: 2
 Human Oral hazard: 1
 Human Contact hazard: 0
 Reduction of amenities: X

7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** 99%
- 7.2 **Storage Temperature:** Currently not available
- 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:**

Category	Classification
Health Hazard (Blue).....	0
Flammability (Red).....	1
Instability (Yellow).....	0
- 8.6 **EPA Reportable Quantity:** 5000 pounds
- 8.7 **EPA Pollution Category:** D
- 8.8 **RCRA Waste Number:** U102
- 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:** 194.20
- 9.3 **Boiling Point at 1 atm:** 543°F = 284°C = 557°K
- 9.4 **Freezing Point:** 34°F = 1°C = 274°K
- 9.5 **Critical Temperature:** Currently not available
- 9.6 **Critical Pressure:** Currently not available
- 9.7 **Specific Gravity:** 1.1905 at 20°C
- 9.8 **Liquid Surface Tension:** Currently not available
- 9.9 **Liquid Water Interfacial Tension:** Currently not available
- 9.10 **Vapor (Gas) Specific Gravity:** 6.69
- 9.11 **Ratio of Specific Heats of Vapor (Gas):** Currently not available
- 9.12 **Latent Heat of Vaporization:** 284 Btu/lb = 158 cal/g = 6.6 X 10⁵ J/kg
- 9.13 **Heat of Combustion:** -10379 Btu/lb = -5766 cal/g = -241 X 10⁵ J/kg
- 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:** Very Low

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
68	74.320		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		C U R R E N T L Y N O T A V A I L A B L E

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	0.430	220	0.024		C	0	0.199
		240	0.044		U	25	0.207
		260	0.078		R	50	0.216
		280	0.132		R	75	0.224
		300	0.215		E	100	0.232
		320	0.340		N	125	0.240
		340	0.522		T	150	0.249
		360	0.781		L	175	0.257
		380	1.145		Y	200	0.265
		400	1.646			225	0.273
		420	2.324		N	250	0.282
		440	3.229		O	275	0.290
		460	4.422		T	300	0.298
		480	5.975			325	0.306
		500	7.974		A	350	0.315
		520	10.522		V	375	0.323
		540	13.740		A	400	0.331
					I	425	0.339
					L	450	0.348
					A	475	0.356
					B	500	0.364
					L	525	0.372
					E	550	0.381
						575	0.389
						600	0.397