

# AZINPHOS METHYL

AZM

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> O,O-Dimethyl s-[(4-oxo-1,2,3-benzotriazine-3-(4h-yl)methyl]phosphorodithioate Gusathion insecticide Guthion insecticide		Solid                      Brown  Sinks in water.
Restrict access. <b>AVOID CONTACT WITH SOLID AND DUST.</b> Wear goggles and self-contained breathing apparatus. Stay upwind. Use water spray to "knock down" dust. Notify local health and pollution control agencies. Protect water intakes.		
<b>Fire</b>	Not flammable. POISONOUS GASES MAY BE PRODUCED WHEN HEATED.	
<b>Exposure</b>	CALL FOR MEDICAL AID. DUST POISONOUS IF INHALED. Move victim to fresh air. If in eyes, hold eyelids open and flush with plenty of water. If breathing is difficult, give oxygen.  SOLID POISONOUS IF SWALLOWED. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.	
<b>Water Pollution</b>	HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.	

### 1. CORRECTIVE RESPONSE ACTIONS

Stop discharge  
 Contain  
 Collection Systems: Skim; Dredge

### 2. CHEMICAL DESIGNATIONS

2.1 **CG Compatibility Group:** Not listed.  
 2.2 **Formula:** C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>P<sub>2</sub>S<sub>2</sub>  
 2.3 **IMO/UN Designation:** 6.1/2783  
 2.4 **DOT ID No.:** 2783  
 2.5 **CAS Registry No.:** 86-50-0  
 2.6 **NAERG Guide No.:** 152  
 2.7 **Standard Industrial Trade Classification:** 59110

### 3. HEALTH HAZARDS

- 3.1 **Personal Protective Equipment:** Dust mask; protective goggles; rubber gloves.  
 3.2 **Symptoms Following Exposure:** Dust irritates eyes. Inhalation or ingestion causes sweating, constriction of pupils of eyes, asthmatic symptoms, cramps, weakness, convulsions, collapse.  
 3.3 **Treatment of Exposure:** INHALATION: remove to fresh air; keep warm; call doctor. EYES: flush with water for at least 15 min. SKIN: flush with water, wash with soap and water. INGESTION: get medical attention at once; give water slurry of charcoal; do NOT give milk or alcohol.  
 3.4 **TLV-TWA:** 0.2 mg/m<sup>3</sup>  
 3.5 **TLV-STEL:** Not listed.  
 3.6 **TLV-Ceiling:** Not listed.  
 3.7 **Toxicity by Ingestion:** Grade 4; oral rat LD<sub>50</sub> = 11-18.5 mg/kg  
 3.8 **Toxicity by Inhalation:** Currently not available.  
 3.9 **Chronic Toxicity:** Currently not available  
 3.10 **Vapor (Gas) Irritant Characteristics:** Currently not available  
 3.11 **Liquid or Solid Characteristics:** Currently not available  
 3.12 **Odor Threshold:** Currently not available  
 3.13 **IDLH Value:** 10 mg/m<sup>3</sup>  
 3.14 **OSHA PEL-TWA:** 0.2 mg/m<sup>3</sup>  
 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 flammable  
 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:** Oxides of sulfur and phosphorus may be formed when in fire situation.  
 4.6 **Behavior in Fire:** Currently not available  
 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 **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:**  
 0.005 mg/l/96 hr/bluegill/TL<sub>m</sub>/fresh water  
 6.2 **Waterfowl Toxicity:** 136 mg/kg LD<sub>50</sub>  
 6.3 **Biological Oxygen Demand (BOD):**  
 Currently not available  
 6.4 **Food Chain Concentration Potential:**  
 None  
 6.5 **GESAMP Hazard Profile:**  
 Bioaccumulation: 0  
 Damage to living resources: 4  
 Human Oral hazard: 3  
 Human Contact hazard: II  
 Reduction of amenities: XXX

### 7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** Technical; 50% wettable powder; water emulsions  
 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:** Poison  
 8.2 **49 CFR Class:** 6.1  
 8.3 **49 CFR Package Group:** II  
 8.4 **Marine Pollutant:** Yes  
 8.5 **NFPA Hazard Classification:** Not listed  
 8.6 **EPA Reportable Quantity:** 1 pound  
 8.7 **EPA Pollution Category:** X  
 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:** Solid  
 9.2 **Molecular Weight:** 317  
 9.3 **Boiling Point at 1 atm:** Decomposes  
 9.4 **Freezing Point:** 163°F = 73°C = 346°K  
 9.5 **Critical Temperature:** Not pertinent  
 9.6 **Critical Pressure:** Not pertinent  
 9.7 **Specific Gravity:** 1.4 at 20°C (solid)  
 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.) -8,600 Btu/lb = -4,800 cal/g = -200 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
	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		N O T  P E R T I N E N T

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
34	0.001		N		N		N
36	0.001		O		O		O
38	0.001		T		T		T
40	0.001		P		P		P
42	0.001		E		E		E
44	0.001		R		R		R
46	0.002		T		T		T
48	0.002		I		I		I
50	0.002		N		N		N
52	0.002		E		E		E
54	0.002		N		N		N
56	0.002		T		T		T
58	0.002		E		E		E
60	0.003		N		N		N
62	0.003		T		T		T
64	0.003						
66	0.003						
68	0.003						
70	0.003						
72	0.003						
74	0.004						
76	0.004						
78	0.004						
80	0.004						
82	0.004						
84	0.004						