

# DIAZINON

DZN

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b>	Liquid Light to dark brown
Alfa-tox O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate Saralex Spectracide	Sinks in water.
<p style="color: red; margin: 0;">Keep people away. Avoid inhalation. Notify local health and pollution control agencies. Protect water intakes.</p>	
<b>Fire</b>	Not flammable. POISONOUS GASES ARE PRODUCED WHEN HEATED.
<b>Exposure</b>	CALL FOR MEDICAL AID.  LIQUID POISONOUS IF SWALLOWED. 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. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
<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.

<p><b>1. CORRECTIVE RESPONSE ACTIONS</b> Stop discharge Collection Systems: Pump; Dredge Do not burn</p>	<p><b>2. CHEMICAL DESIGNATIONS</b></p> <p>2.1 <b>CG Compatibility Group:</b> Not listed. 2.2 <b>Formula:</b> C<sub>12</sub>H<sub>21</sub>N<sub>2</sub>O<sub>3</sub>PS 2.3 <b>IMO/UN Designation:</b> 6.1/1615 2.4 <b>DOT ID No.:</b> 3018 2.5 <b>CAS Registry No.:</b> 333-41-5 2.6 <b>NAERG Guide No.:</b> 152 2.7 <b>Standard Industrial Trade Classification:</b> 51631</p>
<p><b>3. HEALTH HAZARDS</b></p>	
<p>3.1 <b>Personal Protective Equipment:</b> Goggles or face shield; rubber gloves; protective clothing. 3.2 <b>Symptoms Following Exposure:</b> Ingestion or prolonged inhalation of mist causes headache, giddiness, blurred vision, nervousness, weakness, cramps, diarrhea, discomfort in the chest, sweating, miosis, tearing, salivation and other excessive respiratory tract secretion, vomiting, cyanosis, papilledema, uncontrollable muscle twitches, convulsions, coma, loss of reflexes, and loss of sphincter control. Liquid irritates eyes and skin. 3.3 <b>Treatment of Exposure:</b> INHALATION: remove to fresh air; keep warm; get medical attention at once. EYES: flush with plenty of water for at least 15 min. and get medical attention. SKIN: wash contaminated area with soap and water. INGESTION: get medical attention at once; give water slurry of charcoal; do NOT give milk or alcohol. 3.4 <b>TLV-TWA:</b> 0.1 mg/m<sup>3</sup> 3.5 <b>TLV-STEL:</b> Not listed. 3.6 <b>TLV-Ceiling:</b> Not listed. 3.7 <b>Toxicity by Ingestion:</b> Grade 3; oral LD<sub>50</sub> = 76 mg/kg (rat) 3.8 <b>Toxicity by Inhalation:</b> Currently not available. 3.9 <b>Chronic Toxicity:</b> May be mutagenic 3.10 <b>Vapor (Gas) Irritant Characteristics:</b> Currently not available 3.11 <b>Liquid or Solid Characteristics:</b> Currently not available 3.12 <b>Odor Threshold:</b> Currently not available 3.13 <b>IDLH Value:</b> Not listed. 3.14 <b>OSHA PEL-TWA:</b> Not listed. 3.15 <b>OSHA PEL-STEL:</b> Not listed. 3.16 <b>OSHA PEL-Ceiling:</b> Not listed. 3.17 <b>EPA AEGL:</b> Not listed</p>	

## 4. FIRE HAZARDS

- 4.1 **Flash Point:** 82-105°F C.C. (solutions only; pure liquid difficult to burn)
- 4.2 **Flammable Limits in Air:** Not pertinent
- 4.3 **Fire Extinguishing Agents:** (for solutions) Foam, dry chemical, or carbon dioxide
- 4.4 **Fire Extinguishing Agents Not to Be Used:** Water may be ineffective.
- 4.5 **Special Hazards of Combustion Products:** Oxides of sulfur and of phosphorus are generated in fires.
- 4.6 **Behavior in Fire:** Not pertinent
- 4.7 **Auto Ignition Temperature:** Not pertinent
- 4.8 **Electrical Hazards:** Currently not available
- 4.9 **Burning Rate:** (for solutions) 4 mm/min.
- 4.10 **Adiabatic Flame Temperature:** Currently not available
- 4.11 **Stoichiometric Air to Fuel Ratio:** 95.2 (calc.)
- 4.12 **Flame Temperature:** Currently not available
- 4.13 **Combustion Molar Ratio (Reactant to Product):** 26.0 (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:** Not pertinent
- 5.6 **Inhibitor of Polymerization:** Not pertinent

## 6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:** 0.025 ppm/96 hr/stonefly nymph/TL<sub>m</sub>/fresh water  
30 µg/l/48 hr/bluegill/TL<sub>m</sub>/fresh water (becomes bound to soil when used according to directions)
- 6.2 **Waterfowl Toxicity:** LD<sub>50</sub> = 3.54 mg/kg LC<sub>50</sub> = 5 days, 90 ppm mallard duck LC<sub>50</sub> = 7 days, 68 ppm quail
- 6.3 **Biological Oxygen Demand (BOD):** Currently not available
- 6.4 **Food Chain Concentration Potential:** Currently not available
- 6.5 **GESAMP Hazard Profile:**  
Bioaccumulation: +  
Damage to living resources: 4  
Human Oral hazard: 2  
Human Contact hazard: II  
Reduction of amenities: XXX

## 7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** Technical; wettable powders; a variety of emulsifiable solutions in combustible solvents.
- 7.2 **Storage Temperature:** Ambient
- 7.3 **Inert Atmosphere:** No requirement
- 7.4 **Venting:** Open (flame arrester)
- 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:** Keep Away From Food
- 8.2 **49 CFR Class:** 6.1
- 8.3 **49 CFR Package Group:** III
- 8.4 **Marine Pollutant:** No
- 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:** Yes

## 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 **Physical State at 15° C and 1 atm:** Liquid
- 9.2 **Molecular Weight:** 304.4
- 9.3 **Boiling Point at 1 atm:** Very high; decomposes
- 9.4 **Freezing Point:** Not pertinent
- 9.5 **Critical Temperature:** Not pertinent
- 9.6 **Critical Pressure:** Not pertinent
- 9.7 **Specific Gravity:** 1.117 at 20°C (liquid)
- 9.8 **Liquid Surface Tension:** (est.) 35 dynes/cm = 0.035 N/m at 20°C
- 9.9 **Liquid Water Interfacial Tension:** (est.) 40 dynes/cm = 0.040 N/m at 20°C
- 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.) -12,000 Btu/lb = -6,500 cal/g = -270 X 10<sup>5</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
52	70.280	51	0.400	51	1.048	51	4.064
54	70.209	52	0.400	52	1.048	52	4.005
56	70.139	53	0.400	53	1.048	53	3.948
58	70.070	54	0.400	54	1.048	54	3.892
60	70.000	55	0.400	55	1.048	55	3.836
62	69.929	56	0.400	56	1.048	56	3.782
64	69.860	57	0.400	57	1.048	57	3.729
66	69.790	58	0.400	58	1.048	58	3.677
68	69.730	59	0.400	59	1.048	59	3.625
70	69.660	60	0.400	60	1.048	60	3.575
72	69.589	61	0.400	61	1.048	61	3.525
74	69.520	62	0.400	62	1.048	62	3.476
76	69.450	63	0.400	63	1.048	63	3.428
78	69.379	64	0.400	64	1.048	64	3.381
80	69.309	65	0.400	65	1.048	65	3.335
82	69.240	66	0.400	66	1.048	66	3.290
84	69.169	67	0.400	67	1.048	67	3.245
86	69.099	68	0.400	68	1.048	68	3.201
		69	0.400	69	1.048	69	3.158
		70	0.400	70	1.048	70	3.116
		71	0.400	71	1.048	71	3.074
		72	0.400	72	1.048	72	3.033
		73	0.400	73	1.048	73	2.993
		74	0.400	74	1.048	74	2.954
		75	0.400	75	1.048	75	2.915
		76	0.400	76	1.048	76	2.877

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	0.004		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