

DDT

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CAUTIONARY RESPONSE INFORMATION

Common Synonyms p,p'-DDT Dichlorodiphenyltrichloroethane 1,1,1-Trichloro-2,2-bis(p-chlorophenyl) ethane	Solid	Colorless	Odorless
Sinks in water.			
<p style="color: red;">Avoid contact with solid. Call fire department. Notify local health and pollution control agencies. Protect water intakes.</p>			
Fire	Combustible. POISONOUS GASES ARE PRODUCED IN FIRE. Wear goggles and self-contained breathing apparatus. Extinguish with water, dry chemical, foam, or carbon dioxide.		
Exposure	CALL FOR MEDICAL AID. SOLIDS Irritating to skin and eyes. If swallowed, will cause nausea, vomiting, headache, or loss of consciousness. 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.		
Water Pollution	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 Chemical and Physical Treatment: Absorb Clean shore line	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed. 2.2 Formula: (p-CIC ₃ H ₄) ₂ CHCCl ₃ 2.3 IMO/UN Designation: 9/2761 2.4 DOT ID No.: 2761 2.5 CAS Registry No.: 50-29-3 2.6 NAERG Guide No.: 151 2.7 Standard Industrial Trade Classification: 59110
3. HEALTH HAZARDS 3.1 Personal Protective Equipment: Currently not available 3.2 Symptoms Following Exposure: Very large doses are followed promptly by vomiting, due to local gastric irritation; delayed emesis or diarrhea may occur. With smaller doses, symptoms usually appear 2-3 hours after ingestion. These include tingling of lips, tongue, and face; malaise, headache, sore throat, fatigue, coarse tremors of neck, head, and eyelids; apprehension, ataxia, and confusion. Convulsions may alternate with periods of coma and partial paralysis. Vital signs are essentially normal, but in severe poisoning the pulse may be irregular and abnormally slow; ventricular fibrillation and sudden death may occur at any time during acute phase. Pulmonary edema usually indicates solvent intoxication. 3.3 Treatment of Exposure: INGESTION: treatment should be done by a physician. It usually includes gastric lavage and administration of saline cathartic, phenobarbital, and parenteral fluids. Patient should be kept quiet and under observation for at least 24 hours. 3.4 TLV-TWA: 1 mg/m ³ 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 3; LD ₅₀ = 50 to 500 mg/kg (rat) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 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: 500 mg/m ³ 3.14 OSHA PEL-TWA: 1 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: 162°F-171°F C.C.
- 4.2 Flammable Limits in Air: Not pertinent
- 4.3 Fire Extinguishing Agents: Water, foam, dry chemical, or carbon dioxide
- 4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent
- 4.5 Special Hazards of Combustion Products: Toxic and irritating gases may be generated
- 4.6 Behavior in Fire: Melts and burns
- 4.7 Auto Ignition Temperature: Currently not available
- 4.8 Electrical Hazards: Not pertinent
- 4.9 Burning Rate: Currently not available
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichiometric Air to Fuel Ratio: 71.4 (calc.)
- 4.12 Flame Temperature: Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product): 21.0 (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:
0.0039 ppm/24 hr/bass/TL₅₀/fresh water
0.0018 ppm/96 hr/bass/TL₅₀/fresh water
0.0028 ppm/48 hr/killfish/50% kill/salt water
- 6.2 Waterfowl Toxicity: 2240 mg/kg
- 6.3 Biological Oxygen Demand (BOD): Not pertinent
- 6.4 Food Chain Concentration Potential: High
- 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
- 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: 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: U061
- 8.9 EPA FWPCA List: Yes

9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 Physical State at 15° C and 1 atm: Solid
- 9.2 Molecular Weight: 354.5
- 9.3 Boiling Point at 1 atm: Not pertinent
- 9.4 Freezing Point: 226°F = 108°C = 381°K
- 9.5 Critical Temperature: Not pertinent
- 9.6 Critical Pressure: Not pertinent
- 9.7 Specific Gravity: 1.56 at 15°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: 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 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
	I N S O L U B L E		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