



MATERIAL SAFETY DATA SHEETS

189

Dieldrin

1. CHEMICAL IDENTITY

Chemical Name : Dieldrin

Chemical Classification: Toxic

Trade Name :

Synonyms: HEOD, Illoxol, Quintox, 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo-1,4-exo-5,8-dimethanonaphthalene, Alvit

Formula : C₁₂H₈Cl₆O

CAS No: 60-57-1

UN No: 2761

Regulated Identification

Shipping Name : Organo chlorine pesticide

Hazchem Code : 2X

Codes / Label : Class 6.1, Toxic

Hazardous Waste ID No : 15

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
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1 Dieldrin

60-57-1

3

2

4

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 385

Physical State: Solid

Appearance: Colorless to light-tan crystals.

Melting Pt °C: 175.5

Vapour Pressure @ 35°C mmHg: 5.89X10⁻⁶ mm Hg @ 25 deg C

Odour: Mild chemical odour.

Vapour Density(Air =1): 13.2

Solubility in water at 30°C g/100ml: 0.195 mg/l @ 25 deg C

Others: Soluble in organic solvents.

Specific Gravity (Water =1): 1.75 g/cm³ (20 deg C)

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability : No

LEL:

Flash Point °C in OC:

TDG Flammability:

UEL:

Flash Point °C in CC:

Autoignition Temperature °C :

Explosion sensitivity to impact: Stable

Explosion sensitivity to static Electricity: Stable

Hazardous Combustion Products : Emits toxic fumes of Cl₂. Toxic and irritating hydrogen chloride fumes may form in fire.

Hazardous Polymerization : Will not occur.

Combustible Liquid: No

Explosive Material: No

Corrosive Material No

Flammable Material: No

Oxidiser : No

Others:

Pyrophoric Material: No

Organic Peroxide : No

4. REACTIVITY DATA

Chemical Stability : Stable.

Incompatibility with other material : Incompatible with strong acids: concentrated mineral acids, acid catalysts, phenols, strong oxidizers, phenols, active metals, like sodium, potassium, magnesium, and zinc.

Reactivity : Reacts with oxidisers. Reacts with concentrated mineral acids, acid

catalysts.

Hazardous :

Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, ingestion, skin and eyes

Effects of Exposure / Symptoms:

Inhalation & eyes: Aspiration of insecticide containing petroleum distillate may result in pneumonitis. Skin: Extensive contact results in dermal irritation. Ingestion: Nausea, vomiting, and diarrhea may follow ingestion.

Emergency Treatment :

Inhalation: Remove the victim to fresh air area, provide artificial respiration or oxygen if needed.

Skin: Wash the affected area with plenty of water and soap.

Eyes: Irrigate with plenty of water for 15 mins. Seek medical aid immediately.

Ingestion: Induce vomiting. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and call a hospital or poison control center. Transport the victim to a hospital.

LD50 (oral-rat) mg/kg: 47 mg/kg (Male); 38 mg/kg (Female)

STEL:

LC50 (rat) mg/kg:

Odour Threshold: 0.041 ppm

Permissible Exposure Limit: 0.25 mg/m³, skin

TLV (ACGIH) : 0.25 mg/m³, skin

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	2	1	1	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Avoid contact with solid or dust. Provide approved respirator, rubber hand gloves, protective overclothing, side covered safety goggles/face shield and shoes.

Handling : Avoid direct physical contact. Use appropriate, approved safety equipment. Untrained individuals should not handle this chemical or its container. Handling should occur in a chemical fume hood.

Storage : Keep in a cool, dry, well ventilated area, away from strong oxidisers.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : If material involved in fire: Extinguish fire using agent suitable for type of surrounding fire. (Material itself does not burn or burns with difficulty.)

Special Procedure : Keep the containers cool by spraying water, if exposed to heat or flame

Unusual Hazards : Poisonous gases are produced.

EXPOSURE: First Aid Measures:

Inhalation: Remove the victim to fresh air area, provide artificial respiration or oxygen if needed.

Skin: Wash the affected area with plenty of water and soap.

Eyes: Irrigate with plenty of water for 15 mins. Seek medical aid immediately.

Ingestion: Induce vomiting. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and call a hospital or poison control center. Transport the victim to a hospital.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Sweep and collect without making dust. Wash the area with water and soap. Keep material out of water sources and sewers. Build dikes to contain flow as necessary.

Waste Disposal Method: Seal all waste in vapour tight plastic bags for eventual disposal

8. ADDITIONAL INFORMATION / REFERENCES

An Insecticide. A human poison by inhalation, ingestion, skin contact, intravenous, intraperitoneal and possibly other routes. It is a Central Nervous System stimulant. It is considerably more toxic than DDT by ingestion and skin contact. The use of this chemical has been discontinued in the USA.

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :	Contact person
MAILING ADDRESS :	in Emergency :
TELEPHONE / TELEX NOS :	Local Bodies involved :
TELEGRAPHIC ADDRESS :	Standard Packing :
OTHERS :	Trem Card Details / Ref :

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