



MATERIAL SAFETY DATA SHEETS

299

Lindane

1. CHEMICAL IDENTITY

Chemical Name : Lindane

Chemical Classification: Toxic

Trade Name :

Synonyms: Benzene hexachloride, g-1,2,3,4,5,6-Hexachlorocyclohexane, g-BHC, g-HCH, Hexachlorocyclohexane

Formula : C₆H₆Cl₆

CAS No: 58-89-9

UN No: 2761

Regulated Identification

Shipping Name : Organochlorine pesticide, Solid

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 Lindane

58-89-9

3

2

4

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 323.4

Physical State: Solid

Appearance: White crystalline solid

Melting Pt °C: 112.5

Vapour Pressure @ 35°C mmHg: 4.20X10⁻⁵ mm Hg at 20 deg C

Odour: Slight musty odour

Vapour Density(Air =1):

Solubility in water at 30°C g/100ml: 7.3 mg/L at 25 deg C

Others: Soluble in acetone, methanol, xylene, ethyl acetate.

Specific Gravity (Water =1): 1.85

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability :

LEL:

Flash Point °C in OC: 150

TDG Flammability:

UEL:

Flash Point °C in CC:

Autoignition Temperature °C :

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : If heated to decomposition in air, it emits highly toxic fumes of phosgene and hydrogen chloride.

Hazardous Polymerization :

Combustible Liquid:

Explosive Material:

Corrosive Material

Flammable Material:

Oxidiser :

Others:

Pyrophoric Material:

Organic Peroxide :

4. REACTIVITY DATA

Chemical Stability : Stable at room temperature in closed containers under normal storage and handling conditions.

Incompatibility with other material : Strong oxidizing agents.

Reactivity : Corrosive to metals

Hazardous Reaction Products : Carbon monoxide, oxides of nitrogen, irritating and toxic fumes and gases, carbon dioxide.

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

Inhalation : Causes respiratory tract irritation. May cause liver and kidney damage. Exposure may result in irritation, excitement, and convulsions. Can produce delayed pulmonary edema. May cause central, peripheral, and autonomic nervous system effects. **Ingestion :** Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage. Human fatalities have been reported from acute poisoning. Large doses may cause convulsions. May cause central nervous system stimulation. **Skin :** Causes skin irritation. May be fatal if absorbed through the skin. **Eye :** Causes eye irritation. May cause chemical conjunctivitis.

Emergency Treatment :

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not use mouth-to-mouth respiration.

Skin: Get medical aid immediately. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Ingestion: Get medical aid immediately. Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

LD50 (oral-rat) mg/kg: 25 mg/kg (Cat)	STEL:
LC50 (rat) mg/kg:	Odour Threshold:
Permissible Exposure Limit: 0.5 mg/m ³ , skin	TLV (ACGIH) : 0.5 mg/m ³

NFPA Hazard Signals	Health	Flammability	Reactivity	Special
	2	1	0	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure.

Handling : Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage : Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from metals. Poison room locked.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media :

Special Procedure :

Unusual Hazards : When heated to decomposition, this compound emits toxic fumes of chlorine, hydrochloric acid, and phosgene

EXPOSURE: First Aid Measures:

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not use mouth-to-mouth respiration.

Skin: Get medical aid immediately. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Ingestion: Get medical aid immediately. Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into waterways. Clean up spills immediately, with protective equipment. Avoid generating dusty conditions. Provide ventilation. Do not get water inside containers.

Waste Disposal Method:

8. ADDITIONAL INFORMATION / REFERENCES

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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