

LINDANE

0053
April 2007

CAS No: 58-89-9
RTECS No: GV4900000
UN No: 2761
EC No: 602-043-00-6

gamma-1,2,3,4,5,6-Hexachlorocyclohexane
gamma-BHC
gamma-HCH
C₆H₆Cl₆
Molecular mass: 290.8

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Not combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Risk of fire and explosion if formulations contain flammable/explosive solvents.		In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
Inhalation	see Ingestion.	Avoid inhalation of fine dust and mist. Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	MAY BE ABSORBED! See Ingestion.	Protective gloves. Protective clothing.	Wear protective gloves when administering first aid. Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
Eyes	Redness.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water (remove contact lenses if easily possible). Refer for medical attention.
Ingestion	Convulsions. Nausea. Dizziness. Headache. Hypersalivation. Diarrhoea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Refer immediately for medical attention. Do NOT induce vomiting. Rinse mouth. Give a slurry of activated charcoal in water to drink. Rest.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Personal protection: P3 filter respirator for toxic particles. Chemical protection suit. protective gloves. Sweep spilled substance into non-metallic sealable containers, then remove to safe place. Do NOT let this chemical enter the environment.	<p>EU classification T Symbol N Symbol R: 20/21-25-48/22-64-50/53 S: (1/2-)36/37-45-60-61</p> <p>UN classification UN Hazard Class: 6.1 UN Pack Group: III</p> <p>GHS classification Signal: Danger Skull-Health haz-Enviro Fatal if swallowed Fatal in contact with skin Harmful if inhaled dust May cause harm to breast-fed children Causes damage to central nervous system Causes damage to liver through prolonged or repeated exposure Very toxic to aquatic life with long lasting effects</p>

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-61GT7-III	Provision to contain effluent from fire extinguishing. Separated from bases, metals, food and feedstuffs. Store in an area without drain or sewer access.

IPCS

International
Programme on
Chemical Safety



Prepared in the context of cooperation between the International
Programme on Chemical Safety and the European Commission ©
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SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance

WHITE CRYSTALLINE POWDER.

Chemical dangers

On contact with hot surfaces or flames this substance decomposes forming toxic and corrosive fumes. The substance decomposes on contact with bases, producing trichlorobenzene, and on contact with powdered metals.

Occupational exposure limits

TLV: 0.5 mg/m³ as TWA; (skin); A3 (confirmed animal carcinogen with unknown relevance to humans); (ACGIH 2006).

MAK: 0.1 mg/m³; (Inhalable fraction) Peak limitation category: II(8); skin absorption (H); Carcinogen category: 4; Pregnancy risk group: C; BAT issued; (DFG 2006).

Routes of exposure

The substance can be absorbed into the body by inhalation through the skin and by ingestion.

Inhalation risk

A harmful concentration of airborne particles can be reached quickly when dispersed

Effects of short-term exposure

The substance may cause effects on the central nervous system, resulting in convulsions. Exposure may result in death. Medical observation is indicated.

Effects of long-term or repeated exposure

The substance may have effects on the liver. Tumours have been detected in experimental animals but may not be relevant to humans.

PHYSICAL PROPERTIES

Boiling point: 323/C
Melting point: 113/C
Relative density (water = 1): 1.87

Solubility in water, g/100 ml at 20/C: 0.0007
Vapour pressure, Pa at 20/C: 0.0012
Octanol/water partition coefficient as log Pow: 3.61- 3.72

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish. This substance does enter the environment under normal use. Great care, however, should be given to avoid any additional release, e.g. through inappropriate disposal.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested.
Carrier solvents used in commercial formulations may change physical and toxicological properties.
Do NOT take working clothes home.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information