



# Central Pollution Control Board

Ministry of Environment & Forests, Govt of India, Parivesh Bhawan, East Arjun Nagar, Delhi - 110032

## MATERIAL SAFETY DATA SHEETS

296

Heptachlor

### 1. CHEMICAL IDENTITY

**Chemical Name :** Heptachlor

**Chemical Classification:** Explosive

**Trade Name :**

**Synonyms:** Velsicol, 1,4,5,6,7,8, 8a - Heptachloro dicyclopentadiene, Aahepta, Agroceres

**Formula :** C<sub>10</sub>H<sub>5</sub>Cl<sub>7</sub>

**CAS No:** 76-44-8

**UN No:** 2761

### Regulated Identification

**Shipping Name :** Organochlorine pesticide, Solid, Toxic **Hazchem Code :** 2X

**Codes / Label :** Class 6.1, Explosive

**Hazardous Waste ID No :** 15

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Heptachlor	76-44-8	3	
2		4	

### 2. PHYSICAL / CHEMICAL DATA

**Boiling Pt. °C:** 145 (1.5 mm Hg) **Physical State:** Solid **Appearance:** White to light tan waxy solid

**Melting Pt °C:** 95-96 **Vapour Pressure @ 35°C mmHg:** 4.0X10<sup>-4</sup> mm Hg **Odour:** Camphor - like odour.

**Vapour Density(Air =1):** **Solubility in water at 30°C g/100ml:** 0.18 mg/l @ 25 deg C **Others:** Soluble in organic solvents.

**Specific Gravity (Water =1) :** 1.57 @ 9 deg C

**pH :** Not Pertinent

### 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 CL

**Hazardous Polymerization :** Will not occur.

**Combustible Liquid:** No

**Explosive Material:** Yes

**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 :** Strong alkali

**Reactivity :**

**Hazardous :**

**Reaction Products**

## 5. HEALTH HAZARD DATA

**Routes of entry:** Inhalation, Ingestion, Skin & Eyes.

### Effects of Exposure / Symptoms:

Inhalation : Dust causes irritability, tremors and collapse. Ingestion: Causes nausea, vomiting, diarrhoea, irritation of gastrointestinal tract. Skin & eyes: Dust causes irritation to eyes and moderate irritation of skin.

### Emergency Treatment :

**Inhalation:** Remove the victim to fresh air area, apply artificial respiration of oxygen if needed.

**Skin:** Remove the contaminated clothing and wash the affected area with plenty of water and soap.

**Eyes:** First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital.

**Ingestion:** Leave stomach with warm tap water. Avoid fats and oils as they increase the rate of absorption of all chlorinated hydrocarbons. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical. Call a physician.

**LD50 (oral-rat) mg/kg:** 40mg/kg

**STEL:**

**LC50 (rat) mg/kg:**

**Odour Threshold:** 0.02 ppm

**Permissible Exposure Limit:** 0.5 mg/m<sup>3</sup>, skin

**TLV (ACGIH) :** 0.5 mg/m<sup>3</sup>, skin

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals		1	1	

## 6. PREVENTIVE MEASURES

**Personal Protective :** Wear appropriate protective gloves, clothing and goggles.

### Equipment

**Handling :** All chemicals should be considered hazardous. 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 cool, dry, well ventilated area.

**Precautions :** Avoid contact with solid and dust

## 7. EMERGENCY / FIRST AID MEASURES

### FIRE:

#### Fire Extinguishing Media :

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

**Unusual Hazards :** Irritating gases may be produced.

### EXPOSURE: First Aid Measures:

**Inhalation:** Remove the victim to fresh air area, apply artificial respiration of oxygen if needed.

**Skin:** Remove the contaminated clothing and wash the affected area with plenty of water and soap.

**Eyes:** First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital.

**Ingestion:** Leave stomach with warm tap water. Avoid fats and oils as they increase the rate of absorption of all chlorinated hydrocarbons. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical. Call a physician.

## Antidotes / Dosages:

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### SPILLS :

**Steps To Be Taken** : Sweep and collect without making dust. Wash the area with water and soap

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

### 8. ADDITIONAL INFORMATION / REFERENCES

An experimental carcinogen. Acute exposure and chronic doses cause liver damage.

### 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 :**

### 10. DISCLAIMER

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