



## MATERIAL SAFETY DATA SHEETS

15

Aldrin

### 1. CHEMICAL IDENTITY

**Chemical Name :** Aldrin

**Chemical Classification:** Toxic

**Trade Name :** Aldrite, Seedrin

**Synonyms:** Hexachlorohexahydro-endo-exo-dimethanon Napthalene (HHDN), Octalene

**Formula :** C<sub>12</sub>H<sub>8</sub>Cl<sub>6</sub>

**CAS No:** 309-00-2

**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. |
|-----------------------|------------|-----------------------|------------|
| 1 Aldrin              | 309-00-2   | 3                     |            |
| 2                     |            | 4                     |            |

### 2. PHYSICAL / CHEMICAL DATA

**Boiling Pt. °C:** 145 at 2 mm Hg

**Physical State:** Solid

**Appearance:** (Pure) Odourless, white crystalline solid. (Technical) Tan to dark brown solid.

**Melting Pt °C:** 104

**Vapour Pressure @ 35°C mmHg:** 0.000006 at 25 °C

**Odour:** Mild chemical odour

**Vapour Density(Air =1):**

**Solubility in water at 30°C g/100ml:** Insoluble

**Others:** Soluble in organic solvents acetone, benzene, xylene

**Specific Gravity (Water =1 ):** 1.6 at 20 °C(solid)

**pH :**

### 3. FIRE / EXPLOSION HAZARD DATA

**Flammability :** No

**LEL:**

**Flash Point °C in OC:**

**TDG Flammability:**

**UEL:**

**Flash Point °C in CC:** 186

**Autoignition Temperature °C :**

**Explosion sensitivity to impact:** Stable

**Explosion sensitivity to static Electricity:** Stable

**Hazardous Combustion Products :** Emits toxic fumes of Cl<sub>2</sub>

**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 :** May be sensitive to prolonged exposure to light. Reacts with concentrated acids and phenols in the presence of oxidizing agents. Corrosive to metals.

Reactivity :

Hazardous :

Reaction Products

## 5. HEALTH HAZARD DATA

**Routes of entry:** Skin absorption, inhalation, ingestion and eyes.

### Effects of Exposure / Symptoms:

Ingestion or inhalation or skin absorption of a toxic dose will induce nausea, vomiting hyperexcitability, tremors, epileptiform convulsions and ventricular fibrillation. Aldrin may cause temporary reversible kidney and liver injury. Symptoms may be seen after ingestion of less than 1 gram in an adult.

### Emergency Treatment :

**Inhalation:** Move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth respiration.

**Skin:** Remove and isolate contaminated clothing and shoes. Remove material from skin immediately. Immediately flush with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin.

**Eyes:** Irrigate exposed eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, lacrimation, or photophobia persist, the patient should be seen in a health care facility.

**Ingestion:** Induce vomiting immediately. Repeat until vomit fluids is clear. Never give anything by mouth to an unconscious person. Keep patient warm and quiet. Seek medical aid immediately.

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|                                    |                        |                         |                               |
|------------------------------------|------------------------|-------------------------|-------------------------------|
| <b>LD50 (oral-rat) mg/kg:</b>      | 39 mg/kg               | <b>STEL:</b>            |                               |
| <b>LC50 (rat) mg/kg:</b>           |                        | <b>Odour Threshold:</b> |                               |
| <b>Permissible Exposure Limit:</b> | 0.25 mg/m <sup>3</sup> | <b>TLV (ACGIH) :</b>    | 0.25 mg/m <sup>3</sup> , Skin |

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| NFPA Hazard | Health | Flammability | Reactivity | Special |
|-------------|--------|--------------|------------|---------|
| Signals     | 2      | 0            | 0          |         |

## 6. PREVENTIVE MEASURES

**Personal Protective Equipment :** Provide synthetic rubber gloves, hand gloves, respirators, face shields or safety goggles (during loading or unloading operation also).

**Handling :** This is insecticide. Keep away from food stuffs. Handling should occur in a chemical fume hood.

**Storage :** Protect containers against physical damage. Store at in well ventilated, cool, dark place separated from ignition sources. Outdoor or detached storage preferred.

**Precautions :** Avoid contact with solid solution. Do not eat or drink at work place.

## 7. EMERGENCY / FIRST AID MEASURES

### FIRE:

**Fire Extinguishing Media :** Water spray, dry chemical, foam, or carbon dioxide for fires involving solutions of aldrin in hydrocarbon solvents.

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

**Unusual Hazards :** Poisonous gases may be produced in fire.

### EXPOSURE: First Aid Measures:

**Inhalation:** Move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth respiration.

**Skin:** Remove and isolate contaminated clothing and shoes. Remove material from skin immediately. Immediately flush with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin.

**Eyes:** Irrigate exposed eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, lacrimation, or photophobia persist, the patient should be seen in a health care facility.

**Ingestion:** Induce vomiting immediately. Repeat until vomit fluids is clear. Never give anything by mouth to an unconscious person. Keep patient earm and quiet. Seek medical aid immediately.

**Antidotes / Dosages:**

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**SPILLS :**

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

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

**8. ADDITIONAL INFORMATION / REFERENCES**

An Insecticide: This is a stable compound in presence of organic or inorganic bases, stable to the action of hydrated metal chlorides. Very poisonous material.

**9. MANUFACTURERS / SUPPLIERS DATA**

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

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*Total No. of Pages: 3*