Central Pollution Control Board

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

MATERIAL SAFETY DATA SHEETS

331 Isodrin

1. CHEMICAL IDENTITY

Chemical Name: Isodrin

Chemical Classification: Toxic Trade Name:

Synonyms: Compound 711, 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-

endo, endo-dimethan on a phthalene,

Formula: C12H8Cl6 CAS No: 465-73-6 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 Isodrin 465-73-6 **3 2**

2. PHYSICAL / CHEMICAL DATA

Boiling Physical State: Crystals Appearance: Drown

Pt. °C:

Melting 239 - 241 Vapour Pressure Odour: Mild chemical

Pt °C: @ 35°C mmHg:

Vapour Solubility in Insoluble Others: Soluble in most

Density(Air =1): water at 30°C organic solvents

g/100ml:

Specific Gravity (Water =1): 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:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products: When decomposed toxic gases and vapours (CO, HCI)

are released.

Hazardous Polymerization:

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: Incompatible with concentrated mineral acids, acid catalysts, acid

other material oxidizing agents, phenols, reactive metals.

Reactivity :

Isodrin Page 1 of 3

Hazardous Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Skin, Eyes, Ingestion

Effects of Exposure / Symptoms:

The chemical is readily absorbed through the skin. It can cause systemic poisoning. Signs of acute intoxication are primarily related to the central nervous system (CNS), including hyperexcitability, convulsion, depression and death. Symptoms of poisoning include nervousness, headache, dizziness, nausea, vomiting, diarrhoea, lack of coordination and tremor. It may cause hepatic damage.

Emergency Treatment:

Inhalation: Move patient to fresh air. Monitor for respiratory distress. Administer oxygen and

assist ventilation as required. Treat bronchospasm with beta2 agonist and

corticosteroid aerosols.

Skin: If clothing is contaminated remove, and wash skin and hair three times; do an initial

soap washing followed by an alcohol washing followed by a soap washing. Leather

should not be worn in the presence of pesticides as it absorbs them.

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: Seek medical assistance.

LD50 (oral-rat) mg/kg: 7 mg/kg STEL:

LC50 (rat) mg/kg: Odour Threshold:

Permissible TLV (ACGIH):

Exposure Limit:

NFPA Hazard Health Flammability Reactivity Special

Signals 1 1

6. PREVENTIVE MEASURES

Personal Protective: Chemical resistant gloves, face-shields, dust-proof goggles, protective

Equipment clothing and approved respirator

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: Store in a cool, dry, well-ventilated location away from strong oxidisers.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media: Water, dry chemical, carbon dioxide

Special Procedure: Fire fighters are required to wear breathing apparatus for protection

against toxic gases that may evolve in a fire.

Unusual Hazards :

EXPOSURE: First Aid Measures:

Inhalation: Move patient to fresh air. Monitor for respiratory distress. Administer oxygen and

assist ventilation as required. Treat bronchospasm with beta2 agonist and

corticosteroid aerosols.

Skin: If clothing is contaminated remove, and wash skin and hair three times; do an initial

Isodrin Page 2 of 3

soap washing followed by an alcohol washing followed by a soap washing. Leather should not be worn in the presence of pesticides as it absorbs them.

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: Seek medical assistance.

Antidotes / Dosages: (1) Diazepam or paraldehyde, soluble barbiturates (pentabarbitol upto

0.25 to 0.5 gm per day) for control of convulsions. (2) 10% calcium

gluconate I.V. injection.

SPILLS:

Steps To Be Taken : Dampen the spilled material with toluene and then collect in a

container. Wash the surfaces with detergent and water.

Waste Disposal Method: The collected material in an air-tight container should be transferred

to the treatment plant and subsequent disposal of the sludge in the

landfill.

8. ADDITIONAL INFORMATION / REFERENCES

Isodrin is an isomer of aldrin.

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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End of document Total No. of Pages: 3

Isodrin Page 3 of 3