1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Endrin ketone
Product Number: PS772
Brand: Supelco
Product Use: For laboratory research purposes.
Supplier: Sigma-Aldrich Canada Co.
Manufacturer: Sigma-Aldrich Corporation
Address: 3050 Spruce St.
City: St. Louis, Missouri
Postal Code: 63103
Country: USA
Telephone: +1 9058299500
Fax: +1 9058299292
Emergency Phone #: 1-800-424-9300
Preparation Information: Sigma-Aldrich Corporation
Address: Product Safety - Americas Region
Telephone: 1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

WHMIS Classification
D1A Very Toxic Material Causing Immediate and Serious Toxic Effects
Highly toxic by ingestion

GHS Classification
Acute toxicity, Oral (Category 2)

GHS Label elements, including precautionary statements

Pictogram

Signal word: Danger
Hazard statement(s):
H300 Fatal if swallowed.
Precautionary statement(s):
P264 Wash hands thoroughly after handling.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

HMIS Classification
Health hazard: 3
Flammability: 0
Physical hazards: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be fatal if swallowed.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular weight : 380.91 g/mol

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endrin ketone</td>
<td></td>
<td></td>
<td>&lt;=100%</td>
</tr>
<tr>
<td>53494-70-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability
Not flammable or combustible.

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

Explosion data - sensitivity to mechanical impact
No data available

Explosion data - sensitivity to static discharge
No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Specific engineering controls
Use mechanical exhaust or laboratory fume hood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form solid
Colour No data available

Safety data

pH No data available
Melting point/freezing point 285 °C (545 °F)
Boiling point No data available
Flash point No data available
Ignition temperature 523 °C (973 °F)
Auto-ignition temperature 523.0 °C (973.4 °F)
Lower explosion limit No data available
Upper explosion limit No data available
Vapour pressure No data available
Density No data available
Water solubility No data available
Partition coefficient: n-octanol/water No data available
Relative vapour density No data available
Odour No data available
Odour Threshold No data available
Evaporation rate No data available
10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
No data available

Conditions to avoid
No data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Other decomposition products - No data available
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
LD50 Oral - Rat - 10.0 mg/kg

Inhalation LC50
No data available

Dermal LD50
No data available

Other information on acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity
No data available

Teratogenicity
No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**
No data available

**Aspiration hazard**
No data available

**Potential health effects**

<table>
<thead>
<tr>
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<th>Effect</th>
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</tbody>
</table>

**Synergistic effects**
No data available

**Additional Information**
RTECS: Not available

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### 12. ECOLOGICAL INFORMATION

**Toxicity**

- **Toxicity to fish**
  - LC50 - Pimephales promelas (fathead minnow) - 1,640.00 mg/l - 96 h

- **Toxicity to daphnia and other aquatic invertebrates**
  - EC50 - Daphnia magna (Water flea) - 3,600.00 mg/l - 48 h

**Persistence and degradability**
No data available

**Bioaccumulative potential**
No data available

**Mobility in soil**
No data available

**PBT and vPvB assessment**
No data available

**Other adverse effects**
No data available

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### 13. DISPOSAL CONSIDERATIONS

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

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### 14. TRANSPORT INFORMATION

**DOT (US)**
- UN number: 2811
- Class: 6.1
- Packing group: II
- Proper shipping name: Toxic solids, organic, n.o.s. (Endrin ketone)
- Reportable Quantity (RQ): Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN number: 2811    Class: 6.1    Packing group: II    EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Endrin ketone)
Marine pollutant: No

IATA
UN number: 2811    Class: 6.1    Packing group: II
Proper shipping name: Toxic solid, organic, n.o.s. (Endrin ketone)

15. REGULATORY INFORMATION

WHMIS Classification

D1A     Very Toxic Material Causing Immediate and Serious Toxic Effects
Highly toxic by ingestion

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Further information
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