

## Chemical Safety Data Sheet MSDS / SDS

## Isooctyl (2,4,5-trichlorophenoxy)acetate SDS

Revision Date:2024-04-25 Revision Number:1

|           |            |            |            |            |            |            |            |
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name: Isooctyl (2,4,5-trichlorophenoxy)acetate

CAS: 25168-15-4

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses: For R&amp;D use only. Not for medicinal, household or other use.

Uses advised against: none

**Company Identification**

Company: Chemicalbook.in

Address: 5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090

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**SECTION 2: Hazards identification****Classification of the substance or mixture**

no data available

#### GHS label elements, including precautionary statements

Signal word                    no data available

#### Hazard statement(s)

no data available

#### Precautionary statement(s)

#### Prevention

no data available

#### Response

no data available

#### Storage

no data available

#### Disposal

no data available

#### Other hazards which do not result in classification

no data available

### SECTION 3: Composition/information on ingredients

#### Substance

Chemical name:                Isooctyl (2,4,5-trichlorophenoxy)acetate

Common names and  
synonyms:                    Isooctyl (2,4,5-trichlorophenoxy)acetate

CAS number:                    25168-15-4

EC number:                     246-700-1

Concentration:                100%

## SECTION 4: First aid measures

### Description of necessary first-aid measures

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### Most important symptoms/effects, acute and delayed

**SYMPTOMS:** Symptoms of exposure to this compound may include skin and eye irritation; chloracne, liver disorders, neurological and behavioral changes, fat metabolism disorders, porphyria cutanea tarda, melanosis, muscular pains and aches; fatigue, nervousness and intolerance to colds. **ACUTE/CHRONIC HAZARDS:** This compound has irritating vapors. When heated to decomposition it emits toxic fumes. (NTP, 1992)

### Indication of immediate medical attention and special treatment needed, if necessary

#### Absorption, Distribution and Excretion

The chlorophenoxy compounds are absorbed across the gut wall, lung, & the skin. they are not significantly fat storable. excretion occurs within hours, or at most days, primarily in the urine. chlorophenoxy cmpd

## SECTION 5: Firefighting measures

### Suitable extinguishing media

Extinguish fire using agent suitable for type of surrounding fire. 2,4,5-T amine, ester, or salt

### **Specific hazards arising from the chemical**

This chemical is combustible. (NTP, 1992)

### **Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## **SECTION 6: Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

Land spill: Dig a pit, pond, lagoon, holding area to contain liquid or solid material. /SRP: If time permits, pits, ponds, lagoons, soak holes, or holding areas should be sealed with an impermeable flexible membrane liner. / Cover solids with a plastic sheet to prevent dissolving in rain or fire fighting water. 2,4,5-T amine, ester, or salt

## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### **Conditions for safe storage, including any incompatibilities**

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

## SECTION 8: Exposure controls/personal protection

### Control parameters

### Occupational Exposure limit values

no data available

### Biological limit values

no data available

### Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

## SECTION 9: Physical and chemical properties and safety characteristics

Physical state: PHYSICAL DESCRIPTION: White crystals in commerce, a brown or dark brown liquid. (NTP, 1992)

Colour: no data available

|   |  |
|---|--|
| Odour:  | no data available                      |
| Melting point/freezing point:                             | no data available                      |
| Boiling point or initial boiling point and boiling range: | 421.7° C at 760 mmHg                   |
| Flammability:   | no data available                      |
| Lower and upper explosion limit/flammability limit:       | no data available                      |
| Flash point:  | 144.9° C                               |
| Auto-ignition temperature:                                | no data available                      |
| Decomposition temperature:                                | no data available                      |
| pH:   | no data available                      |
| Kinematic viscosity:                                      | no data available                      |
| Solubility:   | less than 1 mg/mL at 75° F (NTP, 1992) |
| Partition coefficient n-octanol/water:                    | no data available                      |
| Vapour pressure:  | 2.55E-07mmHg at 25° C                  |
| Density and/or relative density:                          | 1.218g/cm <sup>3</sup>                 |
| Relative vapour density:                                  | no data available                      |
| Particle characteristics:                                 | no data available                      |

## SECTION 10: Stability and reactivity

### Reactivity

no data available

### Chemical stability

no data available

### Possibility of hazardous reactions

They will burn, though they may take some effort to ignite. /2,4,5-T amine, ester, or salt/Esters react with acids to liberate heat along with alcohols and acids. Strong oxidizing acids may cause a vigorous reaction that is sufficiently exothermic to ignite the reaction products. Heat is also generated by the interaction of esters with caustic solutions. Flammable hydrogen is generated by mixing esters with alkali metals and hydrides.

### Conditions to avoid

no data available

### Incompatible materials

no data available

### Hazardous decomposition products

Hydrogen chloride gas and other irritating fumes may form during fires. 2,4,5-T esters

## SECTION 11: Toxicological information

### Acute toxicity

Oral: no data available

Inhalation: no data available

Dermal: no data available

### Skin corrosion/irritation

no data available

**Serious eye damage/irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

Classification of carcinogenicity: 1) evidence in humans: limited; Overall summary evaluation of carcinogenic risk to humans is Group 2B: The agent is possibly carcinogenic to humans. Chlorophenoxy herbicides; From table

**Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

**SECTION 12: Ecological information**

**Toxicity**



Toxicity to fish: LC50 *Lepomis macrochirus* (bluegill) 12 mg/l/24 hr (50% emulsion of 2,4,5-T esters) /Conditions of bioassay not given

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

#### **Persistence and degradability**

no data available

#### **Bioaccumulative potential**

no data available

#### **Mobility in soil**

No specific data could be found on the adsorption of 2,4,5-T isooctyl ester to soil or sediment. However, phenoxy herbicide esters adsorb extensively to flocculated humic acids, soils and sediment(1,2) with the degree and strength of adsorption increasing with the number of carbons in the alcohol moiety(1).

#### **Other adverse effects**

no data available

### **SECTION 13: Disposal considerations**

#### **Disposal methods**

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### **Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## SECTION 14: Transport information

### UN Number

ADR/RID: UN3345 (For reference only, please check.)

IMDG: UN3345 (For reference only, please check.)

IATA: UN3345 (For reference only, please check.)

### UN Proper Shipping Name

ADR/RID: PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC (For reference only, please check.)

IMDG: PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC (For reference only, please check.)

IATA: PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC (For reference only, please check.)

### Transport hazard class(es)

ADR/RID: 6.1 (For reference only, please check.)

IMDG: 6.1 (For reference only, please check.)

IATA: 6.1 (For reference only, please check.)

### Packing group, if applicable

ADR/RID: I (For reference only, please check.)

IMDG: I (For reference only, please check.)

IATA: I (For reference only, please check.)

### Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

### Special precautions for user

no data available

### Transport in bulk according to IMO instruments

no data available

## **SECTION 15: Regulatory information**

**Safety, health and environmental regulations specific for the product in question**

**European Inventory of Existing Commercial Chemical Substances (EINECS)**

Listed.

**EC Inventory**

Listed.

**United States Toxic Substances Control Act (TSCA) Inventory**

Not Listed.

**China Catalog of Hazardous chemicals 2015**

Not Listed.

**New Zealand Inventory of Chemicals (NZIoC)**

Not Listed.

**(PICCS)**

Not Listed.

**Vietnam National Chemical Inventory**

Not Listed.

**IECSC)**

Not Listed.

**Korea Existing Chemicals List (KECL)**

Not Listed.

## **SECTION 16: Other information**

**Abbreviations and acronyms**

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

### References

IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>

HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:  
[http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)

CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website:  
<http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any