

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 14 Nov 2024

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Fentin chloride

### 1.1. Catalog No.:

677162

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 3), H311  
Skin irritation (Category 2), H315  
Serious eye damage (Category 1), H318  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

## 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal word Danger Hazard statement(s)

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled

H315 Causes skin irritation.

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves/ protective clothing.

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Supplemental Hazard

Statements

none

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : Triphenyltin chloride

Chlorotriphenylstannane

Fentin chloride

Formula : C<sub>18</sub>H<sub>15</sub>ClSn

Molecular weight : 385,47 g/mol

CAS-No. : 639-58-7

EC-No. : 211-358-4

Index-No. : 050-011-00-X

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

Fentin chloride

CAS-No.

EC-No.

Index-No.

639-58-7

211-358-4

050-011-00-X

Acute Tox. 3; Skin Irrit. 2; Eye

Dam. 1; Aquatic Acute 1;

Aquatic Chronic 1; H301,

H331, H311, H315, H318,

H400, H410

M-Factor - Aquatic Acute: 100

- Aquatic Chronic: 100

<= 100 %

### 3.1.1. Formula

C<sub>18</sub>H<sub>15</sub>ClSn

### 3.1.2. Molecular Weight (g/mol)

385.47

### 3.1.3. CAS-No.

639-58-7

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

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

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas, Tin/tin oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## 6. ACCIDENTAL RELEASE MEASURES

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

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.  
For personal protection see section 8.

**6.2 Environmental precautions**

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

**6.3 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.

**6.4 Reference to other sections**

For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 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.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

hygroscopic

Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

Components with workplace control parameters

**8.2 Exposure controls**

Appropriate engineering controls

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

Personal protective equipment

Eye/face 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 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. 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.

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).

Control of environmental exposure

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance Form: solid  
Colour: beige
  - b) Odour No data available
  - c) Odour Threshold No data available
  - d) pH No data available
  - e) Melting point/freezing point  
Melting point/range: 108 °C - dec.
  - f) Initial boiling point and boiling range  
240 °C at 18,0 hPa - lit.
  - g) Flash point No data available
  - h) Evaporation rate No data available
  - i) Flammability (solid, gas) No data available
  - j) Upper/lower flammability or explosive limits  
No data available
  - k) Vapour pressure No data available
  - l) Vapour density No data available
  - m) Relative density No data available
  - n) Water solubility No data available
  - o) Partition coefficient: noctanol/water  
No data available
  - p) Auto-ignition temperature  
No data available
  - q) Decomposition temperature  
No data available
  - r) Viscosity No data available
  - s) Explosive properties No data available
  - t) Oxidizing properties No data available
- ### 9.2 Other safety information
- No data available

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity  
No data available
  - 10.2 Chemical stability  
Stable under recommended storage conditions.
  - 10.3 Possibility of hazardous reactions  
No data available
  - 10.4 Conditions to avoid  
hygroscopic
  - 10.5 Incompatible materials  
Strong oxidizing agents
  - 10.6 Hazardous decomposition products  
Other decomposition products - No data available
- In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects  
Acute toxicity  
LD50 Oral - Rat - 118 - 238 mg/kg  
LD50 Dermal - Rabbit - > 1.000 mg/kg

Skin corrosion/irritation  
Skin - Rabbit  
Result: Severe skin irritation - 24 h  
Serious eye damage/eye irritation  
Eyes - Rabbit  
Result: Severe eye irritation - 24 h  
Respiratory or skin sensitisation  
No data available  
Germ cell mutagenicity  
Human  
lymphocyte  
SLN  
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.  
Reproductive toxicity  
Reproductive toxicity - Rat - Oral  
Paternal Effects: Testes, epididymis, sperm duct. Paternal Effects: Prostate, seminal vesicle, Cowper's gland, accessory glands.  
Reproductive toxicity - Rat - Oral  
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).  
Developmental Toxicity - Rat - Oral  
Effects on Embryo or Fetus: Other effects to embryo.  
Specific target organ toxicity - single exposure  
No data available Specific target organ toxicity - repeated exposure  
No data available  
Aspiration hazard  
No data available  
Additional Information  
RTECS: WH6860000  
Muscle cramps/spasms., narcosis, Respiratory disorders

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity  
Toxicity to fish LC50 - *Oncorhynchus mykiss* (rainbow trout) - 37 µg/l - 96 h Toxicity to daphnia and other aquatic invertebrates  
EC50 - *Daphnia magna* (Water flea) - 0,009 mg/l - 48 h  
Toxicity to algae Growth inhibition EC50 - *Desmodesmus subspicatus* (green algae) - 0,088 mg/l - 72 h  
12.2 Persistence and degradability  
12.3 Bioaccumulative potential  
Bioaccumulation *Poecilia reticulata* (guppy) - 14 d  
- 0,90 µg/l  
Bioconcentration factor (BCF): 1.100  
12.4 Mobility in soil  
No data available  
12.5 Results of PBT and vPvB assessment  
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.  
12.6 Other adverse effects  
Very toxic to aquatic life with long lasting effects

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. 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

## 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 3146 IMDG: 3146 IATA: 3146

14.2 UN proper shipping name

ADR/RID: ORGANOTIN COMPOUND, SOLID, N.O.S. (Fentin chloride)

IMDG: ORGANOTIN COMPOUND, SOLID, N.O.S. (Fentin chloride)

IATA: Organotin compound, solid, n.o.s. (Fentin chloride)

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user

No data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Fentin chloride CAS-No.: 639-58-7

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals Chemical qualifying for PIC notification.

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Chemical qualifying for PIC notification.

Fentin chloride CAS-No.: 639-58-7

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Chemical qualifying for PIC notification.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

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. For lab use only!