

Printing date 07/05/2018 Reviewed on 02/07/2016

1 Identification

· Product name

· Trade name: Triphenyltin acetate, 95%

• *Item number:* 93-5059

• CAS Number: 900-95-8 • EC number:

· EC number: 212-984-0 · Index number:

050-003-00-6

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Strem Chemicals, Inc.

7 Mulliken Way

NEWBURYPORT, MA 01950

USA

info@strem.com

· Information department: Technical Department

· Emergency telephone number:

EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600

2 Hazard(s) identification

· Classification of the substance or mixture



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

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- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms









GHS05

GHS06

GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

fentin acetate (ISO)

· Hazard statements

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

Causes skin irritation. H315 H318 Causes serious eye damage. H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H335 May cause respiratory irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

· Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection. P280

Avoid breathing dust/fume/gas/mist/vapors/spray P261

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

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

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 4Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *3Fire = 0REACTIVITY $\boxed{0}$ Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

900-95-8 fentin acetate (ISO)

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· Identification number(s) · EC number: 212-984-0 · Index number: 050-003-00-6

4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

 $0.69 \, mg/m3$

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· *PAC-2*:

20 mg/m3

· PAC-3:

28 mg/m3

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

900-95-8 fentin acetate (ISO)

PEL Long-term value: 0.1 mg/m³

as Sn

REL Long-term value: 0.1 mg/m³

as Sn, Skin

TLV Short-term value: 0.2 mg/m³

Long-term value: 0.1 mg/m³

as Sn; Skin

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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Safety Data Sheet according to OSHA HCS

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· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

| · Information on basic physical and chemical properties · General Information | | | | |
|--|---|--|--|--|
| · Appearance: | n I | | | |
| Form: Color: | Powder | | | |
| · Odor: | White | | | |
| · Ouor: · Odor threshold: | undistinguishable Not determined. | | | |
| · Oaor inresnoia: | Noi determinea. | | | |
| · pH-value: | Not applicable. | | | |
| · Change in condition | | | | |
| Melting point/Melting range: | 123 °C (253 °F) | | | |
| Boiling point/Boiling range: | Undetermined. | | | |
| · Flash point: | Not applicable. | | | |
| · Flammability (solid, gaseous): | Not determined. | | | |
| · Ignition temperature: | | | | |
| Decomposition temperature: | Not determined. | | | |
| · Auto igniting: | Not determined. | | | |
| · Danger of explosion: | Product does not present an explosion hazard. | | | |
| · Explosion limits: | | | | |
| Lower: | Not determined. | | | |
| Upper: | Not determined. | | | |
| · Vapor pressure: | Not applicable. | | | |
| · Density: | Not determined. | | | |
| · Relative density | Not determined. | | | |

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| | | (Contd. of page | |
|---------------------------------------|--|-----------------|--|
| · Vapor density | Not applicable. | | |
| · Evaporation rate | Not applicable. | | |
| · Solubility in / Miscibility with | | | |
| Water at 20 °C (68 °F): | 0.003 g/l | | |
| · Partition coefficient (n-octanol/wa | ter): Not determined. | | |
| · Viscosity: | | | |
| Dynamic: | Not applicable. | | |
| Kinematic: | Not applicable. | | |
| · Solvent content: | | | |
| Organic solvents: | 0.0 % | | |
| VOC content: | 0.0~g/l / 0.00~lb/gl | | |
| Solids content: | 100.0 % | | |
| · Other information | No further relevant information available. | | |

10 Stability and reactivity

- $\cdot \textit{Reactivity} \ \textit{No further relevant information available}.$
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

| · LD/LC50 value | s that are | relevant for | classification: |
|-----------------|------------|--------------|-----------------|
| | | | |

Oral LD50 81 mg/kg (mouse) 125 mg/kg (rat)

900-95-8 fentin acetate (ISO)

 Oral
 LD50
 125 mg/kg (rat)

 Dermal
 LD50
 500 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

| IIN | - N1 | ımher |
|-----|------|-------|

· **DOT, IMDG, IATA** UN3146

· UN proper shipping name

 \cdot **DOT** Organotin compounds, solid, n.o.s.

· IMDG, IATA ORGANOTIN COMPOUND, SOLID, N.O.S.

- · Transport hazard class(es)
- $\cdot DOT$



· Class 6.1 Toxic substances

· Label 6...

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· IMDG, IATA



· Class 6.1 Toxic substances

· Label 6.1

· Packing group

· DOT, IMDG, IATA III

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Not applicable.

· Danger code (Kemler): 60 · EMS Number: F-A,S-A

· Stowage Category A

· Stowage Code SW2 Clear of living quarters.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

 $\cdot DOI$

• Quantity limitations On passenger aircraft/rail: 100 kg
On cargo aircraft only: 200 kg

· IMDG

Limited quantities (LQ)
 Excepted quantities (EQ)
 Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· UN "Model Regulation": UN 3146 ORGANOTIN COMPOUNDS, SOLID, N.O.S., 6.1, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

Substance is listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

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· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms









GHS05

GHS06

GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

fentin acetate (ISO)

· Hazard statements

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

H315 Causes skin irritation.
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H351 Suspected of causing cancer.

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· Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

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

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director
- · Date of preparation / last revision 07/05/2018 / -

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· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1