

Material Safety Data Sheet

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Version 1.4

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name	TRIPHENYLTIN HYDROXIDE
Product Number	348104
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2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
FENTIN HYDROXIDE	76-87-9	200-990-6	050-004-00-1

Formula	C18H16OSn
Molecular Weight	367.02 AMU
Synonyms	Dowco 186 * Du-Ter * Du-Ter W-50 * ENT 28009 * Erithane * Fenolovo * Fentin hydroxide * Fintine hydroxyde (French) * Fintin hydroxid (German) * Fintin hydroxyde (Dutch) * Fintin idrossido (Italian) * Flo-Tin 4L * Haitin * Hydroxyde de triphenyl-etain (French) * Hydroxytriphenylstannane * Hydroxytriphenyltin * Idrossido di stagno trifenile (Italian) * K 19 * NCI-C00260 * OMS 1017 * Phenostat-H * Sunitron H * Suzu H * Tin, hydroxytriphenyl- * TPTH * Tptoh * Trifenylstanniumhydroxid (Czech) * Trifenyl-tinhydroxyde (Dutch) * Triphenylstannium hydroxide * Triphenyltin hydroxide * Triphenyltin oxide * Triphenyl-zinnhydroxid (German) * Vancide KS

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Toxic in contact with skin and if swallowed. Very toxic by inhalation. Irritating to respiratory system and skin. Limited evidence of a carcinogenic effect. Risk of serious damage to eyes. Toxic: danger of serious damage to health by prolonged exposure through inhalation. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of harm to the unborn child.

Carc. Cat.3 Repr. Cat.3

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

EXPOSURE LIMITS - DENMARK

Source	Type	Value
OEL	TWA	0.1 mg/m3

Remarks: SKIN

EXPOSURE LIMITS - UNITED KINGDOM

Source	Type	Value
OEL	TWA	0.1MG(SN)/M3
OEL	STEL	0.2 mg(Sn)/m3

Remarks: Skin

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.
Hand Protection: Compatible chemical-resistant gloves.
Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Physical State: Solid	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	124 - 126 °C	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	N/A	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

10 - Stability and Reactivity

STABILITY

Stable: Stable.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Tin/tin oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: WH8575000

ACUTE TOXICITY

LD50
Oral
Rat
46 mg/kg

LD50
Oral
Mouse
209 mg/kg

LD50
Skin
Rabbit
1600 mg/kg

LD50
Oral
Guinea pig
27.1 mg/kg

IRRITATION DATA

Eyes
Rabbit
10 mg

Eyes
Guinea pig
100 %
2S
Remarks: Rinsed

SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Muscle cramps/spasms. Narcotic effect.
Respiratory depression.

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.
Skin Absorption: Toxic if absorbed through skin.
Eye Contact: Causes severe eye irritation.
Inhalation: May be fatal if inhaled. Material is irritating to
mucous membranes and upper respiratory tract.
Ingestion: Toxic if swallowed.

TARGET ORGAN INFORMATION

Central nervous system.

CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that has been
reported to be possibly carcinogenic based on its IARC, ACGIH,
NTP, or EPA classification.

CHRONIC EXPOSURE - MUTAGEN

Rat

19 NG/PLATE
Cell Type: Embryo
Morphological transformation.

Mouse
2500 UG/KG
Oral
Micronucleus test

Mouse
2500 UG/KG
Intraperitoneal
Micronucleus test

Hamster
150 UG/L
Cell Type: ovary
Micronucleus test

Hamster
60 UG/L
Cell Type: ovary
Other mutation test systems

Hamster
25 UG/L
Cell Type: ovary
Sister chromatid exchange

CHRONIC EXPOSURE - TERATOGEN

Result: Possible risk of congenital malformation in the fetus.

Species: Rat
Dose: 105 MG/KG
Route of Application: Oral
Exposure Time: (8-14D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 140 MG/KG
Route of Application: Oral
Exposure Time: (1-7D PREG)
Result: Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

Species: Rat
Dose: 140 MG/KG
Route of Application: Oral
Exposure Time: (1-7D PREG)
Result: Effects on Fertility: Other measures of fertility

Species: Rat
Dose: 130 MG/KG
Route of Application: Oral
Exposure Time: (6-15D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

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. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

UN#: 3146
Class: 6.1
PG: II
Proper Shipping Name: Organotin compound, solid, n.o.s.

IMDG

UN#: 3146
Class: 6.1
PG: II
Proper Shipping Name: ORGANOTIN COMPOUND, SOLID, N.O.S.
Marine Pollutant: No
Severe Marine Pollutant: Yes
Technical Name: Required

IATA

UN#: 3146
Class: 6.1
PG: II
Proper Shipping Name: Organotin compound, solid, n.o.s.
Inhalation Packing Group I: No
Technical Name: Required

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

ANNEX I INDEX NUMBER: 050-004-00-1

INDICATION OF DANGER: T+ N

Very toxic. Dangerous for the environment.

R-PHRASES: 24/25 26 37/38 40 41 48/23 50/53 63

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S-PHRASES: 26 28 36/37/39 45 60

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap-suds. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste.

COUNTRY SPECIFIC INFORMATION

Germany
WGK: 3

SWITZERLAND
SWISS POISON CLASS: 2

16 - Other Information

WARRANTY

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. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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