

## Material Safety Data Sheet

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Version 1.1

According to 91/155/EEC

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

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1 - Product and Company Information

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Product Name	TETRAVINYLtin, 97%
Product Number	328669
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
Technical Phone #	+61 2 9841 0555 (1800 800 097)
Fax	+61 2 9841 0500 (1800 800 096)
Emergency Phone #	+44 8701906777 (1800 448 465)

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2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
TETRAVINYLtin	1112-56-7	214-193-6	None
Formula	C <sub>8</sub> H <sub>12</sub> Sn		
Molecular Weight	226.88 AMU		

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3 - Hazards Identification

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SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Flammable. Toxic by inhalation, in contact with skin and if swallowed.

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4 - First Aid Measures

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## AFTER INHALATION

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

## AFTER EYE CONTACT

Assure adequate flushing of the eyes by separating the eyelids with fingers.

## AFTER INGESTION

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

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5 - Fire Fighting Measures

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## EXTINGUISHING MEDIA

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

## SPECIAL RISKS

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

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

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

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### 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

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

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### 7 - Handling and Storage

#### HANDLING

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

#### STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

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### 8 - Exposure Controls / Personal Protection

#### ENGINEERING CONTROLS

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

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse. Discard contaminated shoes.

#### PERSONAL PROTECTIVE EQUIPMENT

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Faceshield (8-inch minimum).

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### 9 - Physical and Chemical Properties

Appearance	Color: Colorless Form: Clear liquid	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	160.0 - 163.0 °C	760 mmHg
MP/MP Range	N/A	
Flash Point	40 °C	Method: closed cup
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	1.246 g/cm3
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

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

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

## 11 - Toxicological Information

### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. General signs of toxicity for overexposure to tetraalkyl tin compounds include muscular weakness and paralysis, leading to respiratory failure, tremors, convulsive movements, closure of the eyelids, and photophobia. Histologically, tetraalkyl tin compounds show a decrease in cytoplasmic basophilia of the liver, chromatolysis of the Purkinje cells of the cerebellum, and increase in the water content of the brain and spinal cord.

### ROUTE OF EXPOSURE

Multiple Routes: High concentrations are extremely destructive to tissues of the mucous membranes and upper respiratory tract, eyes, and skin. Harmful if swallowed, inhaled, or absorbed through skin.

## 12 - Ecological Information

No data available.

## 13 - Disposal Considerations

### SUBSTANCE DISPOSAL

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## 14 - Transport Information

### RID/ADR

UN#: 1993

Class: 3  
PG: III  
Proper Shipping Name: Flammable liquid, n.o.s.

IMDG

UN#: 1993  
Class: 3  
PG: III  
Proper Shipping Name: Flammable liquid, n.o.s.  
Marine Pollutant: No  
Severe Marine Pollutant: No  
Technical Name: Required

IATA

UN#: 1993  
Class: 3  
PG: III  
Proper Shipping Name: Flammable liquid, n.o.s.  
Inhalation Packing Group I: No  
Technical Name: Required

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15 - Regulatory Information

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CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: T  
Toxic.  
R-PHRASES: 10-23/24/25  
Flammable. Toxic by inhalation, in contact with skin and if  
swallowed.  
S-PHRASES: 36/37/39-45  
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).

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16 - Other Information

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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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