SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-T-61741
Product Name	Tetrabutylstannane
CAS No.	1461-25-2
Category	Pesticide Standards
Synonyms	tetrabutylstannane
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Skin irritation (Category 2)
Serious eye damage/eye irritation (Category 2)
Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H301	Not available
H302	Harmful if swallowed.

H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H372	Not available
H400	Not available
H410	Not available
H317	May cause an allergic skin reaction.
H320	Not available
H336	Not available
H361	Not available
H373	Not available
H318	Causes serious eye damage.

Precautionary Statement(s)

Code	Statement
P260	Not available
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P270	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P316	Not available
P301+P317	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if presen
P317	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see … on this label).
P330	Not available
P332+P317	If skin irritation occurs: Get medical help.

P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Not available
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Not available
P333+P317	Not available
P203	Not available
P271	Use only outdoors or in a well-ventilated area.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P318	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P305+P354+P338	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Tetrabutylstannane
CAS Number : 1461-25-2
Molecular Formula : C16H36Sn
Molecular Weight : 347.17
Parent Chemical : -
Synonyms : tetrabutylstannane
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
- General advice: Remove contaminated clothing and shoes. Seek medical attention if symptoms persist or develop.
- Inhalation: Move person to fresh air. Keep at rest. If breathing is difficult, seek medical attention.
- Skin contact: Wash with plenty of soap and water. Get medical attention if irritation occurs.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.
- Ingestion: Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Not available.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.
- No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
- Suitable extinguishing media: Dry chemical, carbon dioxide (CO2), alcohol-resistant foam.
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
- Hazardous combustion products: Carbon oxides; tin oxides.
- Specific hazards: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Use water spray to cool unopened containers.
- Avoid inhalation of combustion products.
- Firefighting procedures: Not available.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Evacuate unnecessary personnel.
- Provide adequate ventilation.
- Avoid breathing vapors/mists.
- Wear appropriate personal protective equipment (see Section 8).

6.2 Environmental precautions
- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment. Prevent entry into drains, surface waters, or soil.

6.3 Methods and material for containment and cleaning up
- Contain spill with inert absorbent material (e.g., sand, earth, vermiculite).
- Collect into suitable, closed containers for disposal.
- Clean contaminated area with appropriate cleaning methods.

6.4 Reference to other sections
- Disposal considerations: see Section 13.
- Exposure controls/personal protection: see Section 8.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Use only with adequate ventilation.
- Avoid contact with skin and eyes.
- Avoid breathing vapors/mists.
- Keep container tightly closed when not in use.
- Do not eat, drink, or smoke when using this product.
- Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities
- Store in a cool, dry, well-ventilated place.
- Keep container tightly closed.
- Protect from heat and sources of ignition.
- Incompatible materials: Not available.

7.3 Specific end use(s)
- Laboratory/research use. Pesticide standard. Not for food, drug, or household use.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
- Occupational exposure limits: Not available.
- Biological limit values: Not available.

8.2 Exposure controls
- Engineering controls: Use local exhaust ventilation or other engineering controls to maintain airborne levels below applicable limits (if established). Provide eyewash station and safety shower.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Chemical-resistant gloves; protective clothing as appropriate.
- Respiratory protection: If ventilation is inadequate, use appropriate respiratory protection.
- Hygiene measures: Remove contaminated clothing and wash before reuse. Wash hands after handling.
- Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 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
- Heat, flames, sparks.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products

- Carbon oxides; tin oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: LC50 (mice) = 142 mg/m3 LD50: 6000 mg/kg (Oral, Mouse) (L345) LD50: 56 mg/kg (Intravenous, Mouse) (L345)
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: Inorganic or organic tin compounds placed on the skin or in the eyes can produce skin and eye irritation. (L308) Mild eye irritation /in rabbits/.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: Organotin compounds produce neurotoxic and immunotoxic effects. Organotins may directly activate glial cells contributing to neuronal cell degeneration by local release of pro-inflammatory cytokines, tumor necrosis factor-_, and/or interleukins. They may also induce apoptosis by direct action on neuronal cells. Organotin compounds stimulate the neuronal release of and/or decrease of neuronal cell uptake of neurotransmitters in brain tissue, including aspartate, GABA, glutamate, norepinephrine, and serotonin. This may be either a contributing factor to or result of the neuronal cell loss. The immunotoxic effects of organotins are characterized by thymic atrophy caused by the suppression of proliferation of immature thymocytes and apoptosis of mature thymocytes. Organotin compounds are believed to exert these effects by suppressing DNA and protein synthesis, inducing the expression of genes involved in apoptosis (such as nur77), and disrupting the regulation of intracellular calcium levels, giving rise to the uncontrolled production of reactive oxygen species, release of cytochrome c to the cytosol, and the proteolytic and nucleolytic cascade of apoptosis. The suppression of proliferation of immature thymocytes further results in the suppression of T-cell-mediated immune responses. Organotins are also endocrine disruptors and are believed to contribute to obesity by inappropriate receptor activation, leading to adipocyte differentiation. Inorganic tin triggers eryptosis, contributing to tin-induced anemia. (L308, A182, A184) A4; Not classifiable as a human carcinogen. /Tin, organic cmpd, as Sn/
- Reproductive toxicity: Breathing or swallowing, or skin contact with organotins, can interfere with the way the brain and nervous system work, causing death in severe cases. Organic tin compounds may also damage the immune and reproductive system. (L307, L308)
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: No data available.

Likely routes of exposure
- Breathing or swallowing, or skin contact with organotins, can interfere with the way the brain and nervous system work, causing death in severe cases. Organic tin compounds may also damage the immune and reproductive system. (L307, L308)

Symptoms related to the physical, chemical and toxicological characteristics
- Organotin compounds produce neurotoxic and immunotoxic effects. Organotins may directly activate glial cells contributing to neuronal cell degeneration by local release of pro-inflammatory cytokines, tumor necrosis factor-_, and/or interleukins. They may also induce apoptosis by direct action on neuronal cells. Organotin compounds stimulate the neuronal release of and/or decrease of neuronal cell uptake of neurotransmitters in brain tissue, including aspartate, GABA, glutamate, norepinephrine, and serotonin. This may be either a contributing factor to or result of the neuronal cell loss. The immunotoxic effects of organotins are characterized by thymic atrophy caused by the suppression of proliferation of immature thymocytes and apoptosis of mature thymocytes. Organotin compounds are believed to exert these effects by suppressing DNA and protein synthesis, inducing the expression

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SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
- No data available.

12.2 Persistence and degradability
- No data available.

12.3 Bioaccumulative potential
- No data available.

12.4 Mobility in soil
- No data available.

12.5 Results of PBT and vPvB assessment
- Not available.

12.6 Endocrine disrupting properties
- No data available.

12.7 Other adverse effects
- No data available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.
- Contaminated packaging: Dispose of as unused product.
- Waste codes: Not available.

SECTION 14: Transport information

SECTION 14: Transport information

- UN number: Not available.
- UN proper shipping name: Not available.
- Transport hazard class(es): Not available.
- Packing group: Not available.
- Environmental hazards: Not available.

- Special precautions for user: Not available.
- Transport in bulk according to IMO instruments: Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Not available.

15.2 Chemical safety assessment
- No data available.

SECTION 16: Other information

SECTION 16: Other information

- Product name: Tetrabutylstannane
- CAS No.: 1461-25-2
- Catalog No.: CS-T-61741
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Disclaimer
- The information provided is believed to be accurate based on available data; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable regulations.

Revision information
- Revision date: Not available.
- Version: Not available.

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