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

1.1. Product identifier

Product form: Substance
Physical state: Solid
Substance name: BIS(TRIPHENYL Tin) OXIDE
Product code: SNB1900
Formula: C36H30OSn2
Synonyms: TRIPHENYL Tin OXIDE; HEXAPHENYL DISTANNOXANE
Chemical family: ORGANOTIN

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Chemical intermediate
For research use only

1.3. Details of the supplier of the safety data sheet

GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com - www.gelest.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Acute Tox. 3 (Oral) H301
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Full text of H statements: see section 16

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US):

Signal word (GHS-US): Danger
Hazard statements (GHS-US): H301 - Toxic if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
Precautionary statements (GHS-US): P280 - Wear protective gloves/protective clothing/eye protection/face protection
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P330 - Rinse mouth
P301+P310 - If swallowed: Immediately call a POISON CENTER
P302+P352 - If on skin: Wash with plenty of soap and water
P332+P313 - If skin irritation occurs: Get medical advice/attention
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P321 - Specific treatment (see first aid instructions on this label)
P362+P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste disposal facility

2.3. Other hazards

No additional information available
2.4. Unknown acute toxicity (GHS US)  
No data available

SECTION 3: Composition/Information on ingredients

3.1. Substance  
Substance type: Multi-constituent  
Name: BIS(TRIPHENYL Tin) OXIDE  
CAS No: 1262-21-1  
EC no: 215-025-4

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis(triphenyltin) oxide</td>
<td>(CAS No) 1262-21-1</td>
<td>95-100</td>
<td>Acute Tox. 3 (Oral), H301</td>
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<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td>Other Organotins</td>
<td></td>
<td>0-5</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

3.2. Mixture  
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures  
First-aid measures general: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed  
Symptoms/injuries after inhalation: May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact: Causes skin irritation. Organotins may be absorbed through the skin.

Symptoms/injuries after eye contact: Causes serious eye irritation.

Symptoms/injuries after ingestion: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed  
Note to physician: Application of corticosteroid creams has been effective in treating severe skin irritation. If blisters develop, they may require abrasion to promote healing.

SECTION 5: Firefighting measures

5.1. Extinguishing media  

Unsuitable extinguishing media: Do not use straight streams.

5.2. Special hazards arising from the substance or mixture  
Fire hazard: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

5.3. Advice for firefighters  
Firefighting instructions: Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures  
6.1.1. For non-emergency personnel  
Protective equipment: Wear protective equipment as described in Section 8.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders  
Protective equipment: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. Provide local exhaust or general room ventilation to minimize exposure to dust.
Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions : Keep container tightly closed. Keep out of reach of children. Store locked up.
Storage area : Store in a well-ventilated place. Store away from heat.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Other Organotins</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>0.1 mg/m³ (Tin)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bis(triphenyltin) oxide (1262-21-1)</strong></td>
<td>USA ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>0.1 mg/m³ as tin</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>0.1 mg/m³ as tin</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls : Handle in an enclosing hood with exhaust ventilation.
Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection : Neoprene or nitrile rubber gloves.
Eye protection : Chemical goggles. Contact lenses should not be worn.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (orange cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>716.02 g/mol</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
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</tr>
<tr>
<td>Refractive index</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
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<tr>
<td>Melting point</td>
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</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 150 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
BIS(TRIPHENYL Tin) Oxide
Safety Data Sheet

Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
VOC content: < 1 %
Solubility: Insoluble in water. Organic solvent: Soluble: THF
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosion limits: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
No additional information available

10.5. Incompatible materials
Acids. Oxidizing agent.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Oral: Toxic if swallowed.

<table>
<thead>
<tr>
<th>BIS(TRIPHENYL Tin) Oxide (1262-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bis(triphenyl tin) oxide (1262-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified
Symptoms/injuries after inhalation: May cause irritation to the respiratory tract.
Symptoms/injuries after skin contact: Causes skin irritation. Organotins may be absorbed through the skin.
Symptoms/injuries after eye contact: Causes serious eye irritation.
Symptoms/injuries after ingestion: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.
Reason for classification: Expert judgment
### SECTION 12: Ecological information

**12.1. Toxicity**  
No additional information available

**12.2. Persistence and degradability**  
No additional information available

**12.3. Bioaccumulative potential**  
No additional information available

**12.4. Mobility in soil**  
No additional information available

**12.5. Other adverse effects**  
Other adverse effects: This substance may be hazardous to the environment.

Effect on ozone layer: No additional information available

Effect on the global warming: No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

**13.1. Waste treatment methods**  
Sewage disposal recommendations: Do not dispose of waste into sewer.

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.

Ecology - waste materials: Avoid release to the environment.

### SECTION 14: Transport information

**14.1. UN number**  
UN-No.(DOT): 3146
DOT NA no.: UN3146

**14.2. UN proper shipping name**  
Proper Shipping Name (DOT): Organotin compounds, solid, n.o.s. (BIS(TRIPHENYL Tin)Oxide)
Hazard labels (DOT): 6.1 - Poison

Packing group (DOT): III - Minor Danger

DOT Packaging Exceptions (49 CFR 173.xxx): 153
DOT Packaging Non Bulk (49 CFR 173.xxx): 213
DOT Packaging Bulk (49 CFR 173.xxx): 240

**14.3. Additional information**  
Emergency Response Guide (ERG) Number: 153
Other information: No supplementary information available.

**Transport by sea**  
DOT Vessel Stowage Location: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel

DOT Vessel Stowage Other: 40 - Stow "clear of living quarters"

**Air transport**  
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 100 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 200 kg
SECTION 15: Regulatory information

15.1. US Federal regulations

**BIS(TRIPHENYLTIN)OXIDE (1262-21-1)**

**TSCA Exemption/Exclusion**

**CAUTION:** This material is supplied for research and development purposes subject to the R&D exemption under TSCA. 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States.

**Bis(triphenyltin) oxide (1262-21-1)**

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

**Bis(triphenyltin) oxide (1262-21-1)**

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

15.3. US State regulations

**BIS(TRIPHENYLTIN)OXIDE (1262-21-1)**

<table>
<thead>
<tr>
<th>State</th>
<th>Proposition</th>
<th>Carcinogens List</th>
<th>Developmental Toxicity</th>
<th>Reproductive Toxicity - Female</th>
<th>Reproductive Toxicity - Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California</td>
<td>65</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>U.S. - California</td>
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<td>No</td>
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<td>No</td>
</tr>
<tr>
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<td>65</td>
<td>No</td>
<td>No</td>
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</tr>
</tbody>
</table>

**Other Organotins**

<table>
<thead>
<tr>
<th>State</th>
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<td>65</td>
<td>No</td>
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<td>Yes</td>
</tr>
</tbody>
</table>

**Non-significant risk level (NSRL)**

SECTION 16: Other information

**Abbreviations and acronyms**

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

**Full text of H-phrases:**

- **H301** Toxic if swallowed
- **H315** Causes skin irritation
- **H319** Causes serious eye irritation

**HMIS III Rating**

Health: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability: 1 Slight Hazard

Physical: 1 Slight Hazard

02/05/2016  EN (English US)  SDS ID: SNB1900
Prepared by safety and environmental affairs.

Date of issue: 02/05/2016       Version: 1.0

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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