SNB1794 - trans-BIS(TRI-n-BUTYLSTANNYL)ETHYLENE

trans-BIS(TRI-n-BUTYLSTANNYL)ETHYLENE
Safety Data Sheet SNB1794
Date of issue: 21/03/2016  Version: 1.0

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

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Substance name</td>
<td>trans-BIS(TRI-n-BUTYLSTANNYL)ETHYLENE</td>
</tr>
<tr>
<td>Product code</td>
<td>SNB1794</td>
</tr>
<tr>
<td>Formula</td>
<td>C26H56Sn2</td>
</tr>
<tr>
<td>Synonyms</td>
<td>TRIBUTYLSTANNEETHYNE</td>
</tr>
<tr>
<td>Chemical family</td>
<td>ORGANOTIN</td>
</tr>
</tbody>
</table>

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

1.2.1. Relevant identified uses

Use of the substance/mixture: Chemical intermediate

1.2.2. Uses advised against

No additional information available

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

GELEST INC.
Fritz-Klatte-Strasse 8
65933 Frankfurt
Germany
T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM
info@gelestde.com - www.gelestde.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

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
EUH-statements: EUH210 - Safety data sheet available on request.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Substance type</th>
<th>Mono-constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>trans-BIS(TRI-n-BUTYLSTANNYL)ETHYLENE</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>14275-61-7</td>
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</table>

Print date: 11/04/2019  EN (English)  SDS ID: SNB1794  1/7
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<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>trans-Bis(tri-n-butylstanny)ethylene</td>
<td>(CAS-No.) 14275-61-7</td>
<td>95 - 100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

### 3.2. Mixtures
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 person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

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

#### 4.2. Most important symptoms and effects, both acute and delayed

- **Symptoms/effects after inhalation**: May cause irritation to the respiratory tract.

- **Symptoms/effects after skin contact**: May cause skin irritation. Organotins may be absorbed through the skin.

- **Symptoms/effects after eye contact**: May cause eye irritation.

- **Symptoms/effects after ingestion**: May be harmful if swallowed.

#### 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

- **Suitable extinguishing media**: Water spray. Foam. Carbon dioxide. Dry chemical.

- **Unsuitable extinguishing media**: None known.

#### 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 all eye and skin contact and do not breathe vapour and mist.

**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 liquid 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**: Clean up any spills as soon as possible, using an absorbent material to collect it. 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 all eye and skin contact and do not breathe vapour and mist. Provide good ventilation in process area to prevent formation of vapour.

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.

Incompatible materials: Oxidizing agent. Direct sunlight.

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

| trans-Bis(tri-n-butylnstanny)ethylene (14275-61-7) | Italy - Portugal - USA ACGIH | ACGIH TWA (mg/m³) | 0.1 mg/m³ as tin |

8.2. Exposure controls

Appropriate engineering controls: Provide local exhaust or general room 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 combination organic vapor/acid gas (yellow 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>
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<tr>
<td>Appearance</td>
<td>Clear liquid.</td>
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<tr>
<td>Molecular mass</td>
<td>606.11 g/mol</td>
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<tr>
<td>Colour</td>
<td>Straw</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild.</td>
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<tr>
<td>Odour threshold</td>
<td>No data available</td>
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<td>Refractive index</td>
<td>1.503</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&lt; 0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>185 °C @ 0.01 mm Hg</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 110 °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>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure</td>
<td>&lt; 0.1 mm Hg @ 20°C</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.15</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
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</table>

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable.

**10.3. Possibility of hazardous reactions**

Direct sunlight causes slow degradation to an inorganic tin salt.

**10.4. Conditions to avoid**

Heat. Open flame. Sparks.

**10.5. Incompatible materials**

Direct sunlight. Oxidizing agent.

**10.6. Hazardous decomposition products**

Organic acid vapors. Tin oxides.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Acute toxicity : Not classified

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Organotins may be absorbed through the skin.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

**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. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Sewage disposal recommendations: Do not dispose of waste into sewer.
Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>14.1. UN number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No. (ADR)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (IMDG)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (IATA)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (ADN)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (RID)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name
Proper Shipping Name (ADR): Not applicable
Proper Shipping Name (IMDG): Not applicable
Proper Shipping Name (IATA): Not applicable
Proper Shipping Name (ADN): Not applicable
Proper Shipping Name (RID): Not applicable

14.3. Transport hazard class(es)
ADR
Transport hazard class(es) (ADR): Not applicable

IMDG
Transport hazard class(es) (IMDG): Not applicable

IATA
Transport hazard class(es) (IATA): Not applicable

ADN
Transport hazard class(es) (ADN): Not applicable

RID
Transport hazard class(es) (RID): Not applicable

14.4. Packing group
Packing group (ADR): Not applicable
Packing group (IMDG): Not applicable
Packing group (IATA): Not applicable
Packing group (ADN): Not applicable
Packing group (RID): Not applicable

14.5. Environmental hazards
Dangerous for the environment: No
Marine pollutant: No
Other information: No supplementary information available
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14.6. Special precautions for user

- Overland transport
  Not applicable

- Transport by sea
  Not applicable

- Air transport
  Not applicable

- Inland waterway transport
  Not applicable

- Rail transport
  Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
  Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
trans-BIS(TRI-n-BUTYLSTANNYL)ETHYLENE is not on the REACH Candidate List
trans-BIS(TRI-n-BUTYLSTANNYL)ETHYLENE is not on the REACH Annex XIV List
trans-BIS(TRI-n-BUTYLSTANNYL)ETHYLENE is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

15.1.2. National regulations

Germany
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands
SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>Not Determined, No Data</td>
</tr>
<tr>
<td>NA</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>LD</td>
<td>Lethal Dose</td>
</tr>
<tr>
<td>LC</td>
<td>Lethal Concentration</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimates</td>
</tr>
<tr>
<td>H</td>
<td>hour</td>
</tr>
<tr>
<td>°C</td>
<td>unless otherwise stated</td>
</tr>
<tr>
<td>mm</td>
<td>millimeters</td>
</tr>
<tr>
<td>Hg, torr</td>
<td>permissible exposure level</td>
</tr>
<tr>
<td>TWA</td>
<td>time weighted average</td>
</tr>
<tr>
<td>TLV</td>
<td>threshold limit value</td>
</tr>
<tr>
<td>TG</td>
<td>Test Guideline</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Material Information System</td>
</tr>
<tr>
<td>CAS No.</td>
<td>Chemical Abstract Service Registration Number</td>
</tr>
<tr>
<td>EC No.</td>
<td>European Commission Registration Number</td>
</tr>
<tr>
<td>EC Index No.</td>
<td>European Commission Index Number</td>
</tr>
<tr>
<td>OECD</td>
<td>The Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>GHS</td>
<td>The Globally Harmonized System of Classification and Labelling</td>
</tr>
<tr>
<td>APF</td>
<td>Assigned Protection Factor</td>
</tr>
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Other information:

Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:
EUH210 Safety data sheet available on request.
The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

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