**SECTION 1: Identification**

1.1. Identification  
Product name: Di-n-PROPYLDICHLOROTIN  
Product code: SND4592  
Product form: Substance  
Physical state: Solid  
Formula: C₆H₁₄Cl₂Sn  
Synonyms: DIPROPYLTINDICHLORIDE; DIPROPYLDICHLOROSTANNANE  
Chemical family: ORGANOTIN

1.2. Recommended use and restrictions on use  
Recommended use: Chemical intermediate

1.3. Supplier  
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: Hazard(s) Identification**

2.1. Classification of the substance or mixture  
GHS-US classification  
Acute toxicity (oral) Category 2 H300 - Fatal if swallowed  
Skin corrosion/irritation Category 2 H315 - Causes skin irritation  
Serious eye damage/eye irritation Category 2A H319 - Causes serious eye irritation  
Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements  
GHS US labeling  
Hazard pictograms (GHS US):  
Signal word (GHS US): Danger  
Hazard statements (GHS US): H300 - Fatal 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. Hazards not otherwise classified (HNOC)  
No additional information available

2.4. Unknown acute toxicity (GHS US)  
Not applicable
DI-n-PROPYLDICHLOROTIN
Safety Data Sheet

SECTION 3: Composition/Information on ingredients

3.1. Substances
Substance type: Mono-constituent
Name: DI-n-PROPYLDICHLOROTIN
CAS-No.: 867-36-7

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di-n-propyldichlorotin</td>
<td>(CAS-No.) 867-36-7</td>
<td>95 - 100</td>
<td>Acute Tox. 2 (Oral), H300</td>
</tr>
<tr>
<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>
</tbody>
</table>

Full text of hazard classes and 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 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 (acute and delayed)
Symptoms/effects after inhalation: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact: Causes skin irritation. Organotins may be absorbed through the skin.
Symptoms/effects after eye contact: Causes serious eye irritation.
Symptoms/effects after ingestion: Fatal if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Immediate medical attention and special treatment, if necessary
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: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media
Unsuitable extinguishing media: None known.

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

5.3. Special protective equipment and precautions for fire-fighters
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: 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 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. Store locked up.


Storage area: Store in a well-ventilated place. Store away from heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Di-n-propyldichlorotin (867-36-7) | ACGIH | ACGIH TWA (mg/m³) | 0.1 mg/m³ as tin |

8.2. Appropriate engineering controls

Appropriate engineering controls: Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment

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

| Physical state | Solid |
| Appearance | Crystals |
| Molecular mass | 275.77 g/mol |
| Color | White |
| Odor | Characteristic |
| Odor threshold | No data available |
| Refractive index | No data available |
| pH | No data available |
| Relative evaporation rate (butyl acetate=1) | No data available |
| Melting point | 82 - 83 ºC |
| Freezing point | No data available |
| Boiling point | 120 - 110 ºC @ 10 mm Hg |
| Flash point | > 110 ºC |
DI-n-PROPYLDICHLOROTIN
Safety Data Sheet

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : < 0.1 mm Hg @ 25°C
Relative vapor density at 20 °C : > 1
Relative density : > 1.4
Solubility : Insoluble in water.
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
Direct sunlight causes slow degradation to an inorganic tin salt.

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Organic acid vapors. Tin oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Di-n-PROPYLDICHLOROTIN (867-36-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Di-n-propyldichlorotin (867-36-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDLo oral rat</td>
</tr>
<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/effects after inhalation : May cause irritation to the respiratory tract.
Symptoms/effects after skin contact : Causes skin irritation. Organotins may be absorbed through the skin.
Symptoms/effects after eye contact : Causes serious eye irritation.
Symptoms/effects after ingestion : Fatal if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

Reason for classification : Expert judgment
**SECTION 12: Ecological information**

<table>
<thead>
<tr>
<th>12.1.</th>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
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</table>

<table>
<thead>
<tr>
<th>12.2.</th>
<th>Persistence and degradability</th>
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</table>

<table>
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<th>12.3.</th>
<th>Bioaccumulative potential</th>
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</table>

<table>
<thead>
<tr>
<th>12.4.</th>
<th>Mobility in soil</th>
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</thead>
<tbody>
<tr>
<td>No additional information available</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12.5.</th>
<th>Other adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other adverse effects: This substance may be hazardous to the environment.</td>
<td></td>
</tr>
<tr>
<td>Effect on the ozone layer: No additional information available</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 13: Disposal considerations**

<table>
<thead>
<tr>
<th>13.1.</th>
<th>Disposal methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewage disposal recommendations: Do not dispose of waste into sewer.</td>
<td></td>
</tr>
<tr>
<td>Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.</td>
<td></td>
</tr>
<tr>
<td>Ecology - waste materials: Avoid release to the environment.</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 14: Transport information**

<table>
<thead>
<tr>
<th>14.1.</th>
<th>UN number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No.(DOT) : 3146</td>
<td></td>
</tr>
<tr>
<td>DOT NA no. : UN3146</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.2.</th>
<th>UN proper shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport document description: UN3146 Organotin compounds, solid, n.o.s. (DI-n-PROPYLDICHLOROTIN), 6.1, II</td>
<td></td>
</tr>
<tr>
<td>Proper Shipping Name (DOT): Organo</td>
<td>tin compounds, solid, n.o.s. (DI-n-PROPYLDICHLOROTIN)</td>
</tr>
<tr>
<td>Packing group (DOT): II - Medium Danger</td>
<td></td>
</tr>
<tr>
<td>Hazard labels (DOT): 6.1 - Poison</td>
<td></td>
</tr>
</tbody>
</table>

| Marine pollutant: Yes (IMDG only) |

| DOT Packaging Non Bulk (49 CFR 173.xxx) : 212 |
| DOT Packaging Bulk (49 CFR 173.xxx) : 242 |
| DOT Packaging Exceptions (49 CFR 173.xxx) : 153 |

<table>
<thead>
<tr>
<th>14.3.</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Response Guide (ERG) Number : 153</td>
<td></td>
</tr>
<tr>
<td>Other information: No supplementary information available.</td>
<td></td>
</tr>
</tbody>
</table>

**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) : 25 kg |
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations

Di-n-PROPYLDICHLOROTIN (867-36-7)

<table>
<thead>
<tr>
<th>TSCA Exemption/Exclusion</th>
<th>CAUTION: This material is supplied for research and development purposes subject to the R&amp;D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a &quot;technically qualified individual&quot; as defined by 40 CFR 720.3(ee). The use of this material for &quot;commercial purposes&quot; as defined by 40 CFR 720.3(r) is not permitted in the United States.</th>
</tr>
</thead>
</table>

Di-propyldichlorotin (867-36-7)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H300</th>
<th>Fatal if swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

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; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

Hazard Rating

Health: 4 Severe Hazard - Life-threatening, major or permanent damage may result from single or repeated overexposures

Flammability: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class III B)

Physical: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives

Prepared by safety and environmental affairs.

Date of issue: 12/10/2015 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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