Material Safety Data Sheet

Section I. Chemical Product and Company Identification

Chemical Name: Di-n-Butyltin Diacetate
Catalog Number: D0302
Synonym: Diacetoxybutyltin
Chemical Formula: \([\text{CH}_3(\text{CH}_2)_3\text{Sn(OOCCH}_3)_2\]
CAS Number: 1067-33-0

Supplier: TCI America
9211 N. Harbortage St.
Portland OR
1-800-423-8616

Chemtrec®
(800) 424-9300 (U.S.)
(703) 527-3887 (International)

HAZARD WARNINGS
Highly toxic compound, do not ingest or inhaled. Avoid all contact with this material. Corrosive to eyes and skin on contact. Moisture sensitive material. Light sensitive. Readily absorbed through skin.

Section II. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Percent (%)</th>
<th>TLV/PEL</th>
<th>Toxicology Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di-n-Butyltin Diacetate</td>
<td>1067-33-0</td>
<td>Min. 95.0(T)</td>
<td>Not available.</td>
<td>Rat LD_{50} (oral) 32mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rabbit LD_{50} (dermal) 2318mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mouse LD_{50} (oral) 46mg/kg</td>
</tr>
</tbody>
</table>

Section III. Hazards Identification

Acute Health Effects
Highly toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death. Corrosive to skin, eyes, and respiratory system. Liquid or spray mist may produce tissue damage, particularly in mucous membranes of the eyes, mouth and respiratory tract. Skin contact may produce burns. Eye contact can result in corneal damage or blindness. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Corrosive materials may cause serious injury if ingested. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Chronic Health Effects
Carcinogenic Effects: Not available.
Mutagenic Effects: Not available.
Teratogenic Effects: Not available.
Developmental Toxicity: Reproductive Effects:
Rat TDLo (oral) 110mg/kg, female 7-17 Days of pregnancy.
Toxic Effects:
Effects on Embryo or Fetus - Fetal death.
Specific Developmental Abnormalities - Central nervous system.
Specific Developmental Abnormalities - Craniofacial.
Rat TDLo (oral) 18700µg/kg, female 7-17 Days of pregnancy.
Toxic Effects:
Maternal Effects - Other effects.
Rat TDLo (oral) 28080µg/kg, female 8 Days of pregnancy.
Toxic Effects:
Specific Developmental Abnormalities - Craniofacial.
Specific Developmental Abnormalities - Musculoskeletal system.
Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section IV. First Aid Measures

Eye Contact
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact
Wash with soap and water. Get medical attention if irritation develops.

Inhalation
If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve.

Ingestion
DO NOT INDUCE VOMITING. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive.

Emergency phone number (800) 424-9300

**Section V. Fire and Explosion Data**

<table>
<thead>
<tr>
<th>Flammability</th>
<th>May be combustible at high temperature.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Points</td>
<td>105°C (221°F).</td>
</tr>
<tr>
<td>Combustion Products</td>
<td>These products are toxic carbon oxides (CO, CO₂), metallic oxides.</td>
</tr>
<tr>
<td>Fire Hazards</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosion Hazards</td>
<td>Risks of explosion of the product in presence of mechanical impact: Not available.</td>
</tr>
<tr>
<td>Fire Fighting Media and Instructions</td>
<td>SMALL FIRE: Use DRY chemical powder.</td>
</tr>
<tr>
<td></td>
<td>LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.</td>
</tr>
<tr>
<td></td>
<td>Consult with local fire authorities before attempting large scale fire-fighting operations.</td>
</tr>
</tbody>
</table>

**Section VI. Accidental Release Measures**

| Spill Cleanup Instructions | Highly toxic material. Corrosive material. Moisture sensitive material. Light sensitive material. Readily absorbed through skin. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. DO NOT get water inside container. DO NOT touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Consult federal, state, and/or local authorities for assistance on disposal. |

**Section VII. Handling and Storage**

| Handling and Storage Information | HIGHLY TOXIC. CORROSIVE. MOISTURE SENSITIVE. LIGHT SENSITIVE. READILY ABSORBED THROUGH SKIN. Keep locked up. Keep container dry. Keep away from heat. Mechanical exhaust required. When not in use, tightly seal the container and store in a dry, cool place. Avoid excessive heat and light. DO NOT ingest. Do not breathe gas/fumes/vapor/spray. Never add water to this product. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Treat symptomatically and supportively. Always store away from incompatible compounds such as oxidizing agents, acids, alkalis (bases). |

**Section VIII. Exposure Controls/Personal Protection**

| Personal Protection | Face shield. Lab coat. Vapor respirator. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. Be sure to use a MSHA/NIOSH approved respirator or equivalent. |

**Section IX. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical state @ 20°C</th>
<th>Liquid. (Colorless.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>1.31 (water=1) @ 25°C</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>351.03</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>142 to 145°C (287.6 to 293°F)</td>
</tr>
<tr>
<td>Melting Point</td>
<td>5°C (41°F)</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.482 @ 20°C</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight acetic acid.</td>
</tr>
<tr>
<td>Taste</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Section X. Stability and Reactivity Data**

| Stability | This material is stable if stored under proper conditions. (See Section VII for instructions) |
| Conditions of Instability | May decompose on exposure to moist air or water. Sensitive to moisture. Sensitive to light. Avoid excessive heat and light. |
| Incompatibilities | Reactive with strong oxidizing agents, strong acids, strong alkalis (bases). |

**Continued on Next Page**
Section XI. Toxicological Information

RTECS Number

WH6880000

Routes of Exposure

Eye Contact. Ingestion. Inhalation. Skin contact.

Toxicity Data

Rat LD₅₀ (oral) 32mg/kg
Rabbit LD₅₀ (dermal) 2318mg/kg
Mouse LD₅₀ (oral) 46mg/kg

Chronic Toxic Effects

Carcinogenic Effects: Not available.
Mutagenic Effects: Not available.
Teratogenic Effects: Not available.
Developmental Toxicity: Reproductive Effects:

Rat TDL₀ (oral) 110mg/kg, female 7-17 Days of pregnancy.
Toxic Effects:
Specific Developmental Abnormalities - Central nervous system.
Specific Developmental Abnormalities - Craniofacial.

Rat TDL₀ (oral) 18700µg/kg, female 7-17 Days of pregnancy.
Toxic Effects:
Maternal Effects - Other effects.
Specific Developmental Abnormalities - Craniofacial.
Specific Developmental Abnormalities - Musculoskeletal system.
Repeated or prolonged exposure to spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Acute Toxic Effects

Highly toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death. Corrosive to skin, eyes, and respiratory system. Liquid or spray mist may produce tissue damage, particularly in mucous membranes of the eyes, mouth and respiratory tract. Skin contact may produce burns. Eye contact can result in corneal damage or blindness. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Corrosive materials may cause serious injury if ingested. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Section XII. Ecological Information

Ecotoxicity

Not available.

Environmental Fate

Not available.

Section XIII. Disposal Considerations

Waste Disposal

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

Section XIV. Transport Information

DOT Classification

CLASS 6.1: Toxic material.

PIN Number

UN2788

Proper Shipping Name

Organotin compounds, liquid, n.o.s.

Packing Group (PG)

II

DOT Pictograms

Section XV. Other Regulatory Information and Pictograms

TSCA Chemical Inventory (EPA)

This compound is ON the EPA Toxic Substances Control Act (TSCA) inventory list.

WHMIS Classification (Canada)

CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
CLASS E: Corrosive liquid.

EINECS Number (EEC)

213-928-8

EEC Risk Statements

R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.
R34- Causes burns.

Emergency phone number (800) 424-9300
Section XVI. Other Information

Notice to Reader

TCI laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.