Section 1 - Chemical Product and Company Identification

MSDS Name: Dibutyltin diacetate, pract.
Catalog Numbers: AC406690000, AC406691000, AC406695000, ACE1182013
Synonyms: Dibutylstannium diacetate; Di-n-butyltin diacetate.

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticaal 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 1067-33-0
Chemical Name: Dibutyltin diacetate
%
EINECS#: 213-928-8

Hazard Symbols: T
Risk Phrases: 25 36/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Danger! May be fatal if swallowed. Light sensitive. Moisture sensitive. May cause central nervous system effects. Harmful if absorbed through skin or if inhaled. Severe marine pollutant. Causes eye, skin, and respiratory tract irritation. Target Organs: Central nervous system, respiratory system, eyes, immune system, skin.

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. Harmful if absorbed through the skin.
Ingestion: May be fatal if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system effects and/or neurological effects.
Inhalation: Harmful if inhaled. Causes respiratory tract irritation.
Chronic: Exposure limits have been recommended for organotin compounds to minimize the potential for adverse effects on immune function and the CNS.
Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Remove contaminated clothing and shoes. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May polymerize explosively when involved in a fire. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Combustible material; may burn but does not ignite readily.

Extinguishing Media:
Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature:
479 deg C ( 894.20 deg F)

Flash Point:
143 deg C ( 289.40 deg F)

Explosion Limits: Lower: 2.00 vol %
Explosion Limits: Upper: .00 vol %

NFPA Rating: health: 3; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Provide ventilation. Do not get water inside containers.

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Store protected from light. Do not allow contact with water. Keep from contact with moist air and steam.

Storage:
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Do not store in metal containers. Store protected from moisture. Store protected from light.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibutyltin diacetate</td>
<td>0.1 mg/m3 TWA (as Sn) (listed under Tin organic compounds).0.2</td>
<td>0.1 mg/m3 TWA (as Sn, except for Tin organic compounds).25</td>
<td>0.1 mg/m3 TWA (as Sn) (listed under Tin organic compounds). Skin -</td>
</tr>
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<td></td>
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</tbody>
</table>
OSHA Vacated PELs: Dibutyltin diacetate: 0.1 mg/m³ TWA (as Sn) (listed under Tin organic compounds)

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear yellow
Odor: acetic odor
pH: Not available
Vapor Pressure: 1.3 mm Hg @ 20°C
Vapor Density: 12.10
Evaporation Rate: Not available
Viscosity: 18cP @ 25 deg C
Boiling Point: 139 deg C @ 5 mm Hg (282.20°F)
Freezing/Melting Point: 7 - 10 deg C
Decomposition Temperature: Not available
Solubility in water: Insoluble
Specific Gravity/Density: 1.3100g/cm3
Molecular Formula: C12H24O4Sn
Molecular Weight: 351.02

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid: Light, moisture, excess heat, confined spaces.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide, carbon monoxide, carbon dioxide, tin/tin oxides.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 1067-33-0: WH6880000
RTECS: CAS# 1067-33-0: Draize test, rabbit, skin: 500 mg/30M Severe;
LD50/LC50:
Oral, mouse: LD50 = 46 mg/kg;
Oral, rat: LD50 = 32 mg/kg;
Skin, rabbit: LD50 = 2318 mg/kg;
Carcinogenicity: Dibutyltin diacetate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 - Ecological Information
Other: See actual entry in RTECS for complete information.

Section 13 - Disposal Considerations
Other: No information available.

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information
US DOT
Shipping Name: ORGANOTIN COMPOUNDS, SOLID, N.O.S.
Hazard Class: 6.1
UN Number: UN3146
Packing Group: II

Canada TDG
Shipping Name: ORGANOTIN COMPOUND, LIQUID, N.O.S. (DIBUTYL Tin DIACETATE)
Hazard Class: 6.1
UN Number: UN2788
Packing Group: II

Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: T
Risk Phrases:
R 25 Toxic if swallowed.
R 36/38 Irritating to eyes and skin.
Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28A After contact with skin, wash immediately with plenty of water.
S 37/39 Wear suitable gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)
CAS# 1067-33-0: 2

Canada
CAS# 1067-33-0 is listed on Canada's DSL List
Canadian WHMIS Classifications: D1A, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 1067-33-0 is listed on Canada's Ingredient Disclosure List

US Federal
TSCA
CAS# 1067-33-0 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 6/24/1999
Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available
to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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