



Material Safety Data Sheet  
Dibutyltin dichloride, 97%

MSDS# 27815

### Section 1 - Chemical Product and Company Identification

MSDS Name: Dibutyltin dichloride, 97%  
Catalog Numbers: AC194870000, AC194870010, AC194872500  
Synonyms: Dibutyldichlorotin; Dibutyldichlorostannane; Di-n-butyltin dichloride.

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 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

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CAS#: 683-18-1  
Chemical Name: Dibutyltin dichloride  
%: 97  
EINECS#: 211-670-0  
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Hazard Symbols:



T N



Risk Phrases:

23/25 37/38 41 48/21/22 51/53 63

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Danger! Moisture sensitive. Harmful if swallowed, inhaled, or absorbed through the skin. Causes severe eye irritation and possible eye injury. Possible risk of harm to the unborn child. Severe marine pollutant. Causes skin and respiratory tract irritation. Target Organs: Central nervous system, respiratory system, eyes, immune system, reproductive system, skin.

#### Potential Health Effects

Eye: Causes severe eye irritation and possible injury.

Skin: Causes severe skin irritation. May be absorbed through the skin in harmful amounts.

Ingestion: Harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.

Inhalation: Harmful if inhaled. Causes respiratory tract irritation.

Chronic: This substance has caused adverse reproductive and fetal effects in laboratory animals. Exposure limits have been recommended for organotin compounds to minimize the potential for adverse effects on immune function and the CNS.

### Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. 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

General Information: 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.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam. Solid streams of water or high volume water jet may spread fire.

Autoignition Temperature: Not applicable.

Flash Point: > 112 deg C (> 233.60 deg F)

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

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: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Do not breathe dust, mist, or vapor. Keep container tightly closed. Use only with adequate ventilation. Do not get in eyes. Avoid contact with skin and clothing.

Storage: Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. Store protected from heat and direct sunlight.

### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Dibutyltin dichloride	0.1 mg/m3 TWA (as Sn) (listed under Tin organic compounds).0.2 mg/m3 STEL (as Sn) (listed under Tin organic compounds).Skin - potential significant contribution to overall exposure by the cutaneous	0.1 mg/m3 TWA (as Sn, except Cyhexatin) (listed under Tin organic compounds).25 mg/m3 IDLH (as Sn, except Cyhexatin) (listed under Tin organic compounds).	0.1 mg/m3 TWA (as Sn) (listed under Tin organic compounds).

OSHA Vacated PELs: Dibutyltin dichloride: 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 appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- 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: Powder

Color: white to beige

Odor: characteristic odor

pH: Not available

Vapor Pressure: .0012 mm Hg @ 25 deg C

Vapor Density: 10.5 (air=1)

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 135 deg C @ 10 mmHg ( 275.00°F)

Freezing/Melting Point: 39-41 deg C

Decomposition Temperature:

Solubility in water: insoluble

Specific Gravity/Density: 1.37-1.40 g/cm<sup>3</sup> @ 20

Molecular Formula: C<sub>8</sub>H<sub>18</sub>Cl<sub>2</sub>Sn

Molecular Weight: 303.83

## Section 10 - Stability and Reactivity

- Chemical Stability: Stable under normal temperatures and pressures. Moisture sensitive.
- Conditions to Avoid: Dust generation, moisture, excess heat.
- Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong acids, strong bases.
- Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, carbon dioxide, tin/tin oxides.
- Hazardous Polymerization: Has not been reported.

## Section 11 - Toxicological Information

RTECS#: CAS# 683-18-1: WH7100000

RTECS:

**CAS# 683-18-1:** Draize test, rabbit, eye: 50 ug/24H Severe;

Draize test, rabbit, skin: 2 mg/24H Severe;

LD50/LC50: Inhalation, rat: LC50 = >364 mg/m<sup>3</sup>/4H;

Oral, mouse: LD50 = 70 mg/kg;

Oral, rabbit: LD50 = 50 ug/kg;

Oral, rat: LD50 = 50 mg/kg;

Carcinogenicity: Dibutyltin dichloride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

Ecotoxicity: Fish: Sheepshead minnow: >4.8 mg/l; 96 h; LC50

Daphnia: Daphnia: 1.4 mg/l; 48 h; EC50

## Section 13 - Disposal Considerations

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

#### Section 14 - Transport Information

US DOT

Shipping Name: TOXIC SOLIDS, CORROSIVE, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: UN2928

Packing Group: II

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

#### Section 15 - Regulatory Information

##### European/International Regulations

###### European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

R 23/25 Toxic by inhalation and if swallowed.

R 37/38 Irritating to respiratory system and skin.

R 41 Risk of serious damage to eyes.

R 48/21/22 Harmful : danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 63 Possible risk of harm to the unborn child.

Safety Phrases:

S 22 Do not breathe dust.

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 36/37/39 Wear suitable protective clothing, 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).

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

###### WGK (Water Danger/Protection)

CAS# 683-18-1: 2

###### Canada

CAS# 683-18-1 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1B, D2A, 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# 683-18-1 is listed on Canada's Ingredient Disclosure List

###### US Federal

###### TSCA

CAS# 683-18-1 is listed on the TSCA Inventory.

#### Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #8 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 merchantability 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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