Material Safety Data Sheet
Dibutyltin oxide, 98%

MSDS# 36217

Section 1 - Chemical Product and Company Identification

MSDS Name:	Dibutyltin oxide, 98%
Catalog Numbers:	AC179360000, AC179360050, AC179361000, AC179365000
Synonyms:	Dibutyloxotin; DBTO; Dibutyloxide of tin; Dibutylstannane oxide; Di-n-butyltin oxide.

Company Identification:	Acros Organics BVBA Janssen Pharmaceuticalaan 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#:	818-08-6
Chemical Name:	Dibutyltin oxide
%:	98
EINECS#:	212-449-1

Hazard Symbols: T

Risk Phrases: 25 36/37/38 48/20/21/22 51/53 63

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! May be fatal if swallowed. May be 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 severe eye irritation.
Skin:	Causes skin irritation. May be absorbed through the skin in harmful amounts.
Ingestion:	May be fatal if swallowed.
Inhalation:	Causes respiratory tract irritation. May be harmful if inhaled.
Chronic:	Animal studies indicate that the product may affect the liver and kidneys. 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:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. 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.
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 immediately. Induce vomiting only when instructed to do so by a physician.
Inhalation:	Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
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. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.
Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Autoignition Temperature:	279 deg C (534.20 deg F)
Flash Point:	Not applicable.
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:	Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. 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. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid breathing dust.
Storage:	Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Dibutyltin oxide	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).

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OSHA Vacated PELs: Dibutyltin oxide: 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
Odor:	characteristic odor
pH:	Not available
Vapor Pressure:	0.011 hPa @ 20 deg C
Vapor Density:	8.6 (air=1)
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not applicable.
Freezing/Melting Point:	Decomposition w/o melting
Decomposition Temperature:	
Solubility in water:	Insoluble
Specific Gravity/Density:	1.6 (water=1)
Molecular Formula:	C8H18OSn
Molecular Weight:	248.92

Section 10 - Stability and Reactivity

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

Section 11 - Toxicological Information

RTECS#: CAS# 818-08-6: WH7175000

RTECS:
CAS# 818-08-6: Draize test, rabbit, eye: 100 mg Severe;
Draize test, rabbit, skin: 500 mg/24H Mild;

LD50/LC50: Oral, rat: LD50 = 44900 ug/kg;

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Other: Oral, rat: TDLo = 31200 ug/kg/26W -I. Toxic effects noted include alteration of classical conditioning, normocytic anemia, changes in RBC count.

Carcinogenicity: Dibutyltin oxide - 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

Other: No information available.

Section 13 - Disposal Considerations

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: 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

Risk Phrases:

R 25 Toxic if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 48/20/21/22 Harmful : danger of serious damage to health by prolonged exposure through inhalation, 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 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 60 This material and its container must be disposed of as hazardous waste.

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

WGK (Water Danger/Protection)

CAS# 818-08-6: 2

Canada

CAS# 818-08-6 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# 818-08-6 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 818-08-6 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 10/31/1998

Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available

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