



Material Safety Data Sheet

Bis(tri-n-butyltin) oxide, stabilized, 96%

Section 1 - Chemical Product and Company Identification

MSDS Name: Bis(tri-n-butyltin) oxide, stabilized, 96%
Catalog Numbers: 10651-0000, 10651-0025, 10651-0050, 10651-1000, 10651-5000
Synonyms: Hexabutyl distannoxane
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

CAS#	Chemical Name:	%	EINECS#
56-35-9	Bis(tri-n-butyltin) oxide	96%	200-268-0

Hazard Symbols: T N



Risk Phrases: 21 25 36/38 48/23/25 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful in contact with skin. Toxic if swallowed. Irritating to eyes and skin. Toxic : danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye: Causes severe eye irritation. May cause eye burns. Causes redness and pain. Lachrymator (substance which increases the flow of tears).
Skin: Causes skin irritation. Harmful if absorbed through the skin. May cause skin burns. Causes redness and pain.
Ingestion: Poison by ingestion. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.
Inhalation: May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema.
Chronic: Prolonged or repeated skin contact may cause dermatitis. May cause kidney injury.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes,

Skin:	occasionally lifting the upper and lower eyelids. Get medical aid. Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:	Do NOT induce vomiting and seek IMMEDIATE MEDICAL ADVICE. Wash mouth out with 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.

Notes to Physician:

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.
Extinguishing Media:	Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide.

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Provide ventilation.

Section 7 - Handling and Storage

Handling:	Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.
Storage:	Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 56-35-9:

United Kingdom, WEL - TWA: (tin organic compounds): 0.1 mg/m³ TWA (except cyhexatin, as Sn) United Kingdom, WEL - STEL: (tin organic compounds): 0.2 mg/m³ STEL (except cyhexatin, as Sn)

United States OSHA: 0.1 mg/m³ TWA (as Sn) (Tin organic compounds).

Belgium - TWA: (tin organic compounds): 0.1 mg/m³ VLE (as Sn) Belgium - STEL: (tin organic compounds): 0.2 mg/m³ VLE (as Sn)

France - VME: (tin organic compounds): 0.1 mg/m³ VME (as Sn) France - VLE: (tin organic compounds): 0.2 mg/m³ VLE (as Sn)

Germany: 0.0021 ppm TWA; 0.05 mg/m³ TWA Germany: skin notation

Malaysia: (tin organic compounds): 0.1 mg/m³ TWA (as Sn)

Netherlands: (tin organic compounds): 0.2 mg/m³ STEL (as Sn) Netherlands: (tin organic compounds): 0.1 mg/m³ MAC (as Sn)

Spain: (tin organic compounds): 0.1 mg/m³ VLA-ED (as Sn)
Spain: (tin organic compounds): 0.2 mg/m³ VLA-EC (as Sn)

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: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: colorless to light yellow

Odor: characteristic odor

pH: Not available

Vapor Pressure: Not available

Viscosity: cSt 25 deg C

Boiling Point: 180 deg C @ 2.00mm Hg (356.00°F)

Freezing/Melting Point: Not available

Autoignition Temperature: Not available

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

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Decomposition Temperature: Not available

Solubility in water: insoluble

Specific Gravity/Density: 1.1700g/cm³

Molecular Formula: $\text{CH}_3(\text{CH}_2)_3\text{SnOSn}(\text{CH}_2)_3\text{CH}_3$

Molecular Weight: 596.11

Section 10 - Stability and Reactivity

Chemical Stability: Not available

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Incompatible materials, rubber.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, tin/tin oxides.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 56-35-9: JN8750000

LD50/LC50: RTECS:
CAS# 56-35-9: Draize test, rabbit, eye: 50 ug/24H Severe;
Draize test, rabbit, eye: 100 uL/24H Mild;
Draize test, rabbit, skin: 500 uL/24H Severe;
Oral, mouse: LD50 = 55 mg/kg;
Oral, rat: LD50 = 87 mg/kg;
Skin, rabbit: LD50 = 900 mg/kg;
Skin, rat: LD50 = >300 mg/kg;
.
Other:

Carcinogenicity: Bis(tri-n-butyltin) 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

Ecotoxicity: Not available

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	ORGANOTIN COMPOUND, LIQUID, N.O.S.	ORGANOTIN COMPOUND, LIQUID, N.O.S.	ORGANOTIN COMPOUND, LIQUID, N.O.S.
Hazard Class:	6.1	6.1	6.1
UN Number:	2788	2788	2788
Packing Group:	III	III	III

Severe Marine Pollutant

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

R 21 Harmful in contact with skin.

R 25 Toxic if swallowed.

R 36/38 Irritating to eyes and skin.

R 48/23/25 Toxic : danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 35 This material and its container must be disposed of in a safe way.

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 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# 56-35-9: 3

Canada

CAS# 56-35-9 is listed on Canada's DSL List

US Federal

TSCA

CAS# 56-35-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 7/16/1996

Revision #1 Date 7/04/2000

Revisions were made in Sections: General revision.

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