otto chemie pvt ltd

An ISO 9001: 2015 & GMP Certified Company

101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel: + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

Creation Date :- 18-05-2025 Rivision Date :- 01-08-2030

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: bis(Tributyltin) oxide, 96%

Product Code: T 2053 CAS No: 56-35-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification

OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, (Category 3) Acute toxicity, (Category 3)

Acute toxicity, (Category 3)

Skin irritation, (Category 2)

Eye irritation, (Category 2)

Reproductive toxicity, (Category

Specific target organ toxicity -

repeated exposure, (Category 1)

Short-term (acute) aquatic

hazard, (Category 1)

Long-term (chronic) aquatic

hazard, (Category 1)

Acute toxicity, (Category 4)

Persistent, bioaccumulative and

Toxic

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

Hazard Statements

H301 + H311 + H331

H312

H315

H319 H360FD

H372

H410

EUH440

Precautionary Statements

P201

P202

P273 P280 H301: Toxic if swallowed.

H331: Toxic if inhaled.

H311: Toxic in contact with skin.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H360FD: May damage fertility. May

damage the unborn child.

H372: Causes damage to organs through

prolonged or repeated exposure. H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long

lasting effects.

H312: Harmful in contact with skin.

EUH440: Accumulates in the environment

and living organisms including in humans.

Danger

Toxic if swallowed, in contact with skin or if inhaled.

Harmful in contact with skin. Causes skin irritation.

Causes serious eye irritation.

May damage fertility. May damage the unborn child.

Causes damage to organs through prolonged or repeated

exposure.

Very toxic to aquatic life with long lasting effects.

Accumulates in the environment and living organisms including

in humans.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and

understood.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face

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protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P301 + P310

P391 Collect spillage.

Dispose of contents/ container to an approved waste disposal P501

plant. none

Danger

in humans.

understood.

protection.

plant.

none

Collect spillage.

Causes damage to organs through prolonged or repeated

May damage fertility. May damage the unborn child.

Toxic if swallowed, in contact with skin or if inhaled.

Obtain special instructions before use.

Avoid release to the environment.

Accumulates in the environment and living organisms including

Do not handle until all safety precautions have been read and

Wear protective gloves/ protective clothing/ eye protection/ face

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Dispose of contents/ container to an approved waste disposal

Supplemental Hazard

Statements

Restricted to professional users. Reduced Labelling (<= 125 ml)

Pictogram

Signal Word

Hazard Statements

H372

EUH440

H360FD H301 + H311 + H331

Precautionary Statements

P201

P202

P273 P280

P301 + P310 P391

P501

Supplemental Hazard

Statements 2.3 Other hazards

This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Bis[tri-n-butyltin(IV)]oxide

HBD

Tributyltin(IV) oxide Hexabutyldistannoxane

TBTO

Formula : C24H54OSn2 : 596,10 g/mol Molecular weight CAS-No. 56-35-9 EC-No. : 200-268-0

Component	Classification	Concentration
bis(tributyltin) oxide Included in the		
Candidate List of Substances of Very		
High Concern		
(SVHC) according to Regulation (EC) No.		
1907/2006 (REACH)		

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CAS-No.	56-35-9	Acute Tox. 3; Acute Tox.	<= 100 %
EC-No.	200-268-0	4; Skin Irrit. 2; Eye Irrit.	
		2; Repr. 1B; STOT RE 1;	
		Aquatic Acute 1; Aquatic	
		Chronic 1; PBT; H311,	
		H301, H331, H312, H315,	
		H319, H360FD, H372,	
		H400, H410, EUH440	
		Concentration limits:	
		>= 1 %: STOT RE 1,	
		H372; 0,25 - < 1 %: STOT	
		RE 2, H373; >= 1 %: Eye	
		Irrit. 2, H319; >= 1 %:	
		Skin Irrit. 2, H315;	
		M-Factor - Aquatic Acute:	
		100 - Aquatic Chronic:	
		100	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen. In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eve contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Tin/tin oxides

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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5.4 Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency

procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

(see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g.

Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with

applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)

2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm Break through time: 480 min

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 120 min

If used in solution, or mixed with other substances, and under conditions which

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differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

protective clothing

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) Physical state
- b) Color
- c) Odor
- d) Melting

point/freezing point

- e) Initial boiling point and boiling range
- f) Flammability (solid,

gas)

- g) Úpper/lower flammability or
- explosive limits
- h) Flash point
- i) Autoignition temperature
- j) Decomposition
- temperature
- k) pH
- I) Viscosity
- m) Water solubility
- n) Partition coefficient:
- n-octanol/water
- o) Vapor pressure
- p) Density
- Relative density
- q) Relative vapour
- density
- r) Particle
- characteristics
- s) Explosive properties
- t) Oxidizing properties
- 9.2 Other safety information

No data available

clear, liquid colourless, light yellow characteristic

Melting point: 45 °C

180 °C at 3 hPa - lit.

No data available

No data available

113 °C - closed cup No data available

> 230 °C

7,5 at 20 °C

Viscosity, kinematic: No data available Viscosity, dynamic: 9 mPa.s at 20 °C

0,0712 g/l at 20 °C - OECD Test Guideline 105- slightly soluble

No data available

< 0,0001 hPa at 25 °C 1,17 g/cm3 at 25 °C - lit. No data available No data available

No data available

Not classified as explosive.

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

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The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout)

0,0029 mg/l - 96 h

(US-EPA)

Remarks: (referred to the cation)

Toxicity to daphnia and other aquatic

invertebrates EC50 - Daphnia magna (Water flea) - 0,002 mg/l - 48 h

Remarks: (ECOTOX Database)

Toxicity to

fish(Chronic toxicity)

flow-through test NOEC - Cyprinodon variegatus (sheepshead

minnow) - 0,00017 mg/l - 180 d

Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)

semi-static test EC50 - Daphnia magna (Water flea) - 0,00012 mg/l

- 21 d

Remarks: (ECHA)

12.2 Persistence and degradability

Biodegradability Biotic/Aerobic - Exposure time 21 d

12.3 Bioaccumulative potential

Bioaccumulation Lepomis macrochirus - 28 d

(bis(tributyltin) oxide)

Bioconcentration factor (BCF): 700

(US-EPA)

Indication of bioaccumulation.

12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

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12.6 Endocrine disrupting properties

Product:

Assessment: The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

ORGANOTIN COMPOUND, LIQUID, N.O.S. (bis(tributyltin) oxide)

Organotin compound, liquid, n.o.s. (bis(tributyltin) oxide)

ORGANOTIN COMPOUND, LIQUID, N.O.S. (bis(tributyltin) oxide)

IATA: 2788

IATA: 6.1

IATA: III

IATA: no

IMDG: 2788

IMDG: 6.1

IMDG: III

IMDG Marine pollutant: yes

No data available

12.7 Other adverse effects

Avoid release to the environment.

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number ADR/RID: 2788

14.2 UN proper shipping name

ADR/RID:

IMDG: IATA:

14.3 Transport hazard class(es)

ADR/RID: 6.1

14.4 Packaging group

ADR/RID: III

14.5 Environmental hazards

ADR/RID: yes

14.6 Special precautions for user

Tunnel restriction code

Further information

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied. **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No.

Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture.

placing on the market and use of certain dangerous substances, mixtures and articles

(Annex XVII)

bis(tributyltin) oxide

REACH - Restrictions on the manufacture,

placing on the market and use of certain

dangerous substances, mixtures and articles

(Annex XVII)

bis(tributyltin) oxide

REACH - Candidate List of Substances of Very

High Concern for Authorisation (Article 59).

bis(tributyltin) oxide

National legislation

Seveso III: Directive 2012/18/EU of the

European Parliament and of the Council

on the control of major-accident hazards

involving dangerous substances.

H2 ACUTE TOXIC

E1 ENVIRONMENTAL HAZARDS

Other regulations

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Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

