

**DIOCTYLtin OXIDE**

Safety Data Sheet SND4460

Date of issue: 10/20/2016

Version: 1.0

SECTION 1: Identification**1.1. Product identifier**

Product name : DIOCTYLtin OXIDE
 Product code : SND4460
 Product form : Substance
 Physical state : Solid
 Formula : (C₁₆H₃₄O₂Sn)_n
 Synonyms : DI-n-OCTYLtin OXIDE
 TIN-OXIDE, DI-N-OCTYL-
 STANNANE, DIOCTYLOXO-
 DI-N-OCTYL-OXO-STANNANE
 Chemical family : ORGANOTIN

1.2. Recommended use of the chemical and restrictions on use

Recommended use : Chemical intermediate
 For research and industrial use only

1.3. Details of the supplier of the safety data sheet**GELEST, INC.**

11 East Steel Road

Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com**1.4. Emergency telephone number**

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS-US classification**

Not classified

2.2. Label elements**GHS-US labeling**

No labeling applicable

2.3. Hazards not otherwise classified (HNOC)

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/Information on ingredients**3.1. Substance**

Substance type : Multi-constituent
 Name : DIOCTYLtin OXIDE
 CAS No : 870-08-6

Name	Product identifier	%	GHS-US classification
Diocetyl tin oxide	(CAS No) 870-08-6	95 - 100	Not classified
Other Organotin		0 - 5	Not classified

Full text of hazard classes and H-statements : see section 16

3.2. Mixture

Not applicable

4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.
 First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

DIOCTYL TIN OXIDE

Safety Data Sheet

First-aid measures after skin contact	: Wash with plenty of soap and water. Get medical advice/attention.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May cause irritation to the respiratory tract.
Symptoms/injuries after skin contact	: May cause skin irritation. Organotins may be absorbed through the skin.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physician: Application of corticosteroid creams has been effective in treating severe skin irritation. If blisters develop, they may require abrasion to promote healing.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Foam. Carbon dioxide. Dry chemical.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.
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5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear protective equipment as described in Section 8.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Do not allow powder to accumulate in work areas. Provide local exhaust or general room ventilation to minimize exposure to dust.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep container tightly closed.
Incompatible materials	: Bases. Reducing agents.
Storage area	: Store in a well-ventilated place. Store away from heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DIOCTYL TIN OXIDE

Safety Data Sheet

Diocetyl tin oxide (870-08-6)		
ACGIH	ACGIH TWA (mg/m ³)	0.1 mg/m ³ as tin
Other Organotins		
ACGIH	ACGIH TWA (mg/m ³)	0.1 mg/m ³ as tin
OSHA	OSHA PEL (TWA) (mg/m ³)	0.1 mg/m ³ as tin

8.2. Exposure controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation.
Personal protective equipment	: Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection	: Neoprene or nitrile rubber gloves.
Eye protection	: Chemical goggles. Contact lenses should not be worn.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (orange cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Molecular mass	: 361.13 g/mol
Color	: White to off-white.
Odor	: Very slight.
Odor threshold	: No data available
Refractive index	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 245 - 248 °C decomposes
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 205 °C
Auto-ignition temperature	: > 400 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.3
VOC content	: < 3 %
Solubility	: Water: 0.12 mg/l
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Direct sunlight causes degradation to an inorganic tin salt.

DIOCTYL TIN OXIDE

Safety Data Sheet

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Bases. Reducing agents.

10.6. Hazardous decomposition products

Organic acid vapors. Tin oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

DIOCTYL TIN OXIDE (870-08-6)	
LD50 intravenous mouse	100 mg/kg
Diocetyl tin oxide (870-08-6)	
LD50 oral rat	2334 mg/kg 2500 mg/kg RTECS Number: WH7620000
ATE US (oral)	2334.000 mg/kg body weight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact : May cause skin irritation. Organotins may be absorbed through the skin.

Symptoms/injuries after eye contact : May cause eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

Effect on ozone layer : No additional information available

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose of solid materials or residues at a licensed site. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

DIOCTYL TIN OXIDE

Safety Data Sheet

SECTION 14: Transport information

14.1. UN number

Not regulated for transport.

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Dioctyltin oxide (870-08-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Dioctyltin oxide (870-08-6)

Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations

Dioctyltin oxide (870-08-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Dioctyltin oxide (870-08-6)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on CICR (Turkish Inventory and Control of Chemicals)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling.

HMIS III Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

DIOCTYL TIN OXIDE

Safety Data Sheet

Prepared by safety and environmental affairs.

Date of issue: 10/20/2016 Version: 1.0

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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