

## Section 1. Identification of the substance/mixture and of the company/undertaking

**Product name** : THERMOLITE® 31 S; THERMOLITE® 31 SUPER  
**SDS #** : CA\_RFL  
**Product code** : CA\_RFL

### Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Stabiliser: polyvinyl chloride (PVC)

**Uses advised against** : Biocidal products  
 Consumer applications  
 Cosmetic product  
 Professional use  
 Toys

**Supplier's details** : PMC Organometallics Inc.  
 2316 Highland Ave  
 Carrollton, KY 41008 USA  
 +1-855-638-2549

**Company telephone number** : 855-638-2549

**Company Fax no.** : 856-638-2156

**Emergency telephone number** : Chemtrec 1-800-424-9300; Chemtrec [INT]: +1-703-527-3887

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : ACUTE TOXICITY (oral) - Category 4  
 ACUTE TOXICITY (inhalation) - Category 3  
 SKIN IRRITATION - Category 2  
 SERIOUS EYE DAMAGE - Category 1  
 SKIN SENSITIZATION - Category 1  
 GERM CELL MUTAGENICITY - Category 2  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1  
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
 Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 5%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

## Section 2. Hazards identification

- Hazard statements** : Harmful if swallowed.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Toxic if inhaled.  
Suspected of causing genetic defects.  
Causes damage to organs. (thymus)  
Causes damage to organs through prolonged or repeated exposure. (thymus)
- Precautionary statements**
- Prevention** : Obtain special instructions before use. Wear protective gloves. Wear protective clothing. Wear eye or face protection. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
- Response** : Immediately call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	CAS number
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	≥90 - ≤98	10584-98-2
n-butyltin trichloride	<5	1118-46-3
Mineral Oil from various sources	≤2	VARIOUS

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Section 4. First aid measures

- Skin contact** : Immediately wipe material from skin. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Aspiration hazard if swallowed. Can enter lungs and cause damage.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Toxic if inhaled. Causes damage to organs following a single exposure if inhaled.
- Skin contact** : Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

## Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : CO<sub>2</sub> dry chemical powder Dry sand or other suitable absorbent.

**Unsuitable extinguishing media** : Do not use water. Violent reaction may occur.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
sulfur oxides  
halogenated compounds  
metal oxide/oxides  
carbon oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. Store away from direct sunlight.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	<p><b>ACGIH TLV (United States, 3/2019).</b>  <b>Absorbed through skin.</b>            TWA: 0.1 mg/m<sup>3</sup>, (as Sn) 8 hours.            STEL: 0.2 mg/m<sup>3</sup>, (as Sn) 15 minutes.</p> <p><b>NIOSH REL (United States, 10/2016).</b>  <b>Absorbed through skin.</b>            TWA: 0.1 mg/m<sup>3</sup>, (as Sn) 10 hours.</p> <p><b>OSHA PEL (United States, 5/2018).</b>            TWA: 0.1 mg/m<sup>3</sup>, (as Sn) 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>  <b>Absorbed through skin.</b>            TWA: 0.1 mg/m<sup>3</sup>, (measured as Sn) 8 hours.            Form: Organic</p>
n-butyltin trichloride	<p><b>ACGIH TLV (United States, 3/2019).</b></p>

## Section 8. Exposure controls/personal protection

Mineral Oil from various sources

**Absorbed through skin.**

TWA: 0.1 mg/m<sup>3</sup>, (as Sn) 8 hours.

STEL: 0.2 mg/m<sup>3</sup>, (as Sn) 15 minutes.

**NIOSH REL (United States, 10/2016).**

**Absorbed through skin.**

TWA: 0.1 mg/m<sup>3</sup>, (as Sn) 10 hours.

**OSHA PEL (United States, 5/2018).**

TWA: 0.1 mg/m<sup>3</sup>, (as Sn) 8 hours.

**OSHA PEL 1989 (United States, 3/1989).**

**Absorbed through skin.**

TWA: 0.1 mg/m<sup>3</sup>, (measured as Sn) 8 hours.

Form: Organic

**ACGIH TLV (United States).**

TWA: 5 mg/m<sup>3</sup>, (oil ) Form: Mist

STEL: 10 mg/m<sup>3</sup> Form: Mist

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Section 8. Exposure controls/personal protection

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Liquid.  
**Color** : Yellow.  
**Odor** : Odorless.  
**Odor threshold** : Not available.  
**Melting point** : -30°C (-22°F)  
**Boiling point** : Decomposition temperature: >200°C (>392°F)  
**Flash point** : Closed cup: 113 to 117°C (235.4 to 242.6°F) [Pensky-Martens.]  
**Evaporation rate** : Not available.  
**Flammability (solid, gas)** : Not available.  
**Lower and upper explosive (flammable) limits** : Not available.  
**Vapor pressure** : 0 kPa (0 mm Hg) [room temperature]  
**Vapor density** : Not available.  
**Relative density** : 1.12 to 1.14  
**Solubility** : Not available.  
**Solubility in water** : 0 g/l  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : Not available.  
**Decomposition temperature** : >200°C (>392°F)  
**Viscosity** : Not available.  
**Flow time (ISO 2431)** : Not available.

## Section 10. Stability and reactivity

**Reactivity** : Readily hydrolyzed by moisture, with the liberation of hydrochloric acid.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Incompatible materials** : acids  
Strong oxidizer  
reducing agents

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	LC50 Inhalation Dusts and mists	Rat - Male, Female	941 mg/m <sup>3</sup> Aerosol	4 hours
	LD50 Dermal	Rat - Male, Female	2000 mg/kg	-
n-butyltin trichloride	LD50 Oral	Rat	510 mg/kg	-
	LD50 Oral	Rat	2140 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
Mineral Oil from various sources	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-butyltin trichloride	Eyes - Severe irritant	Rabbit	-	24 hours 50 ug	-
	Skin - Severe irritant	Rabbit	-	24 hours 750 ug	-

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	Category 1	-	thymus
n-butyltin trichloride	Category 3	-	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	Category 1	-	thymus

#### Aspiration hazard

Name	Result
Mineral Oil from various sources	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.



## Section 11. Toxicological information

### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Toxic if inhaled. Causes damage to organs following a single exposure if inhaled.
- Skin contact** : Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

- General** : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : Suspected of causing genetic defects.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
THERMOLITE® 31 S; THERMOLITE® 31 SUPER	532.8	2070.4	N/A	N/A	0.99
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	510	2000	N/A	N/A	0.941
n-butyltin trichloride	2140	N/A	N/A	N/A	N/A
Mineral Oil from various sources	N/A	2500	N/A	N/A	N/A

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	EC50 0.56 mg/l	Algae - Desmodesmus subspicatus	72 hours
n-butyltin trichloride	EC50 0.035 mg/l	Crustaceans - D. magna	48 hours
	LC50 11.7 mg/l	Fish - Brachydanio rerio	96 hours
	EC50 0.31 mg/l	Algae - Scenedesmus subspicatus	72 hours
	EC50 83 mg/l	Daphnia	48 hours
	LC50 >100 mg/l	Fish - Danio rerio	96 hours
	Acute EC50 38.35 ng/L Marine water	Algae - Platymonas sp. - Exponential growth phase	96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	3.4	-	low
n-butyltin trichloride	0.41	2.1	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

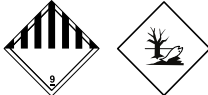
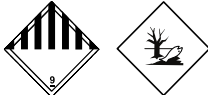
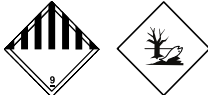
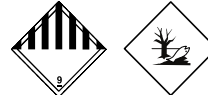
## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers

## Section 13. Disposal considerations

that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	Not regulated.	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	-	Environmentally Hazardous Substance , Liquid n.o.s (Organotin mercapto ester)	Environmentally Hazardous Substance , Liquid n.o.s (Organotin mercapto ester)	Environmentally Hazardous Substance , Liquid n.o.s (Organotin mercapto ester)	Environmentally Hazardous Substance , Liquid n.o.s (Organotin mercapto ester)
Transport hazard class(es)	-	9 	9 	9 	9 
Packing group	-	-	-	-	-
Environmental hazards	No.	Yes.	Yes.	Yes.	Yes.

### Additional information

- DOT Classification** : **Special provisions** The LC50 was determined by reducing the particle size of the mist/dust to the respirable range. Since it is not reasonably foreseeable to have lethal concentration of such small particles during transportation, DOT regulations { 49CFR Section 173.132(b)(3)} do not require the consideration of the LC50 for determining the transportation classification.
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).  
Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.
- Mexico Classification** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.  
**Quantity limitation** Passenger and Cargo Aircraft: 450 L.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : ACUTE TOXICITY (oral) - Category 4  
 ACUTE TOXICITY (inhalation) - Category 3  
 SKIN IRRITATION - Category 2  
 SERIOUS EYE DAMAGE - Category 1  
 SKIN SENSITIZATION - Category 1  
 GERM CELL MUTAGENICITY - Category 2  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1  
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

#### Composition/information on ingredients

Name	%	Classification
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	≥90 - ≤98	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B GERM CELL MUTAGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
n-butyltin trichloride	<5	FLAMMABLE LIQUIDS - Category 4 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Mineral Oil from various sources	≤2	ASPIRATION HAZARD - Category 1

### State regulations

**Massachusetts** : The following components are listed: Mineral oil.

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: Mineral oil.

## Section 15. Regulatory information

**Pennsylvania** : The following components are listed: Mineral oil.

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : At least one component is not listed. <b>Japan inventory (ISHL)</b> : Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

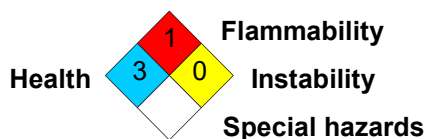
Health	*	4
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

## Section 16. Other information

### National Fire Protection Association (U.S.A.)



### Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
GERM CELL MUTAGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

### History

**Date of printing** : 5/12/2020  
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**Key to abbreviations** : ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 N/A = Not available  
 SGG = Segregation Group  
 UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.