

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Product identifier

**Product Name** THERMOLITE® 890 STABILIZER

Other means of identification

**SDS Code** CA\_RLS  
**Synonyms** Monooctyltin 2-Ethylhexylmercaptoacetate, (dioctyltin bis (2-ethylhexyl mercaptoacetate))

Recommended use of the chemical and restrictions on use

**Recommended Use** Stabilizer.  
**Uses advised against** Consumer use  
 SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)  
 Plastic products: Toys  
 Biocidal Products (e.g. disinfectants, pest control)  
 Note REACH - Annex XVII #20

Details of the supplier of the safety data sheet

**Supplier Address**  
 PMC Organometallix Inc.  
 2316 Highland Ave  
 Carrollton, KY 41008

Emergency telephone number

**Company Phone Number** PMC Organometallix Customer Service: 1-855-638-2549; 1-856-638-2156  
**24 Hour Emergency Phone Number** Chemtrec 1-800-424-9300 Chemtrec [INT]: +1-703-527-3887  
**Emergency Telephone** Chemtrec [INT]: +1-703-527-3887

**2. HAZARDS IDENTIFICATION**

Classification

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)



Acute toxicity - Oral	Category 4
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

**Emergency Overview**

**DANGER**

**Hazard statements**  
 Harmful if swallowed  
 Causes damage to organs through prolonged or repeated exposure

**Appearance** clear                      **Physical state** liquid                      **Odor** characteristic

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

May be harmful in contact with skin.

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms** Monoocetyltn 2-Ethylhexylmercaptoacetate, (dioctyltin bis (2-ethylhexyl mercaptoacetate).  
**Chemical Family** Organotin compounds.  
**Chemical nature** Tin organic compounds.

Chemical Name	CAS No	Weight-%	Trade Secret
Dioctyltin bis(2-ethylhexyl mercaptoacetate)	15571-58-1	55 - 80	
Octyltin tris(2-ethylhexyl mercaptoacetate)	27107-89-7	28 - 38	
By-product	Proprietary	2.5 - 5.5	
2-Ethylhexyl mercaptoacetate	7659-86-1	<2	

### 4. FIRST AID MEASURES

**First aid measures**

**General advice** Immediate medical attention is required. If symptoms persist, call a physician.

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately. If symptoms persist, call a physician.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required.

**Inhalation** Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required. If not breathing, give artificial respiration. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

**Ingestion** Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water. Call a physician.

**Self-protection of the first aider** Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** May cause sensitization of susceptible persons. Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

In the event of fire and/or explosion do not breathe fumes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. May cause sensitization by inhalation and skin contact. Do not allow run-off from fire-fighting to enter drains or water courses. Runoff may pollute waterways.

**Hazardous combustion products** Carbon oxides. Hazardous metal fumes and oxides. Oxides of sulfur. Hydrocarbons.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See section 12 for additional ecological information. The product is insoluble and floats on water. Do not allow into any sewer, on the ground or into any body of water.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust

ventilation.

### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Protect from direct sunlight.

**Incompatible materials** Incompatible with oxidizing agents, Acids, Bases, Strong reducing agents, Incompatible with strong acids and bases, Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Control parameters**

#### **Exposure Guidelines** Exposure limits are listed below, if they exist.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	PMC OEL
Dioctyltin bis(2-ethylhexyl mercaptoacetate) 15571-58-1	STEL: 0.2 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> Sn S*	TWA: 0.1 mg/m <sup>3</sup> Sn (vacated) TWA: 0.1 mg/m <sup>3</sup> Sn Sn (vacated) S*	IDLH: 25 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> except Cyhexatin Sn	-
Octyltin tris(2-ethylhexyl mercaptoacetate) 27107-89-7	STEL: 0.2 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> Sn S*	TWA: 0.1 mg/m <sup>3</sup> Sn (vacated) TWA: 0.1 mg/m <sup>3</sup> Sn Sn (vacated) S*	IDLH: 25 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> except Cyhexatin Sn	-
By-product	STEL: 0.2 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> Sn S*	TWA: 0.1 mg/m <sup>3</sup> Sn (vacated) TWA: 0.1 mg/m <sup>3</sup> Sn Sn (vacated) S*	IDLH: 25 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> except Cyhexatin Sn	-

#### **Legend**

S\* - Skin Absorber

NIOSH IDLH

Immediately Dangerous to Life or Health

#### **Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### **Appropriate engineering controls**

**Engineering Controls** Showers, Eyewash stations, Ventilation systems.

### **Individual protection measures, such as personal protective equipment**

**Eye/face protection** Tight sealing safety goggles. Face protection shield.

**Skin and body protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Avoid contact with skin, eyes or clothing. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### **Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	characteristic
<b>Appearance</b>	clear	<b>Odor threshold</b>	No information available
<b>Color</b>	yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	Not Applicable
Melting point / freezing point	-40 °C / -40 °F	
Boiling point / boiling range	> 200 °C / 392 °F	Decomposes
Flash point	> 93.34 °C / > 200.01 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	0.0000001 hPa @ 20°C	
Vapor density	No information available	
Specific Gravity	1.08	
Water solubility	Insoluble in water	
Solubility in other solvents	Heptane isomers	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	> 250°C/482°F	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	2.5
Density	No information available
Bulk density	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No known effects under normal use conditions.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Extremes of temperature and direct sunlight. Exposure to air or moisture over prolonged periods.

**Incompatible materials**

Incompatible with oxidizing agents, Acids, Bases, Strong reducing agents, Incompatible with strong acids and bases, Strong oxidizing agents.

**Hazardous Decomposition Products**

Carbon oxides, Hazardous metal fumes and oxides, Oxides of sulfur, Hydrocarbons.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

No data available.

**Inhalation**

Inhalation of vapors in high concentration may cause irritation of respiratory system.

<b>Eye contact</b>	Irritating to eyes.
<b>Skin Contact</b>	Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact.
<b>Ingestion</b>	Reacts with gastric acid to form organotin chlorides.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dioctyltin bis(2-ethylhexyl mercaptoacetate)	> 2010 mg/kg (Mice) 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	
Octyltin tris(2-ethylhexyl mercaptoacetate)	= 3400 mg/kg ( Rat )	> 2000 mg/kg (Rat)	
By-product	= 943 mg/kg ( Rat )		

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Reproductive toxicity</b>	Product is or contains a chemical which is a known or suspected reproductive hazard.
<b>STOT - single exposure</b>	No information available
<b>STOT - repeated exposure</b>	Thymus.
<b>Chronic toxicity</b>	Avoid repeated exposure. Repeated contact may cause allergic reactions in very susceptible persons. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.
<b>Target Organ Effects</b>	Thymus, liver, kidney, Immune system, blood, Central nervous system, Eyes, Respiratory system, Skin, Urinary Tract.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

<b>ATEmix (oral)</b>	639 mg/kg
<b>ATEmix (dermal)</b>	2857 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects.

4 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Dioctyltin bis(2-ethylhexyl mercaptoacetate) 15571-58-1	= 0.17: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	= 93.2: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static = 24.8: 96 h <i>Danio rerio</i> mg/L LC50	> 100 mg/l	= 0.17 - 0.18: 48 h <i>Daphnia magna</i> mg/L EC50 > 3.2: 21 d <i>Daphnia magna</i> mg/L EC50
Octyltin tris(2-ethylhexyl mercaptoacetate) 27107-89-7	= 0.71: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 > 0.0088: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC0	= 73: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static > 0.945: 96 h <i>Cyprinus carpio</i> mg/L	> 100 mg/l	= 1: 48 h <i>Daphnia magna</i> mg/L EC50 = 0.023 - 0.039: 48 h <i>Daphnia magna</i> mg/L EC50 = 0.228: 21 d <i>Daphnia magna</i> mg/L EC50 = 0.036: 21 d <i>Daphnia magna</i> mg/L NOEC
2-Ethylhexyl	0.41: 72 h	0.23 mg/l 96 h	= 2.7 mg/l	0.38: 48 h ( <i>Daphnia magna</i> )

mercaptoacetate 7659-86-1	Pseudokirchneriella subcapitata mg/L EC50 (biomass) 0.91: 72 h Pseudokirchneriella subcapitata mg/L EC50 (growth rate)	(Oncorhynchus mykiss (rainbow trout)) 9: 48 h Leuciscus idus mg/L LC50 4.4: 96 h Pimephales promelas mg/L LC50	(Water flea)mg/L EC50
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**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
2-Ethylhexyl mercaptoacetate 7659-86-1	4.7

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Dioctyltin bis(2-ethylhexyl mercaptoacetate) 15571-58-1	Toxic
Octyltin tris(2-ethylhexyl mercaptoacetate) 27107-89-7	Toxic
By-product	Toxic

### 14. TRANSPORT INFORMATION

**DOT**

Not regulated

**IATA**

Proper shipping name

Not regulated.

Not regulated

**IMDG**

Not regulated

### 15. REGULATORY INFORMATION

**All of the components in the product are on the following Inventory lists**

The classification and labeling information in this Safety Data Sheet should be viewed as provisional.

**International Inventories**

EINECS/ELINCS

Complies or Exempt

TSCA

Complies

AICS	Complies
DSL/NDSL	Complies
ENCS	Complies
KECL	Complies
PICCS	Complies
IECSC	Complies
NZIoC	Complies
TCSI	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances  
 NZIoC - New Zealand Inventory of Chemicals  
 TCSI - Taiwan Chemical Substance Inventory

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Any Substance regulated Title 40 of the Code of Federal Regulations, Part 372 is listed below, if it exists.

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

Any Substance regulated as a pollutant pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) is listed below, if it exists.

**CERCLA**

Any Substance regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) is listed below, if it exists.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 2	Flammability 2	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 2*	Flammability 2	Physical hazards 0	Personal protection X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			
<b>Prepared By</b>	PMC Group			
<b>Issue Date</b>	22-May-2014			
<b>Revision Date</b>	03-Jan-2017			



**Revision Note**

(M)SDS sections updated 14

**This material safety data sheet complies with the requirements of 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)**

**Disclaimer**

**The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**