



# SAFETY DATA SHEET

Issue Date 23-May-2014

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Version 3

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

### Product identifier

**Product Name** THERMOLITE® 380 STABILIZER

### Other means of identification

**SDS Code** CA\_ROC

**Document** CA\_ROC

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Stabilizer.

**Uses advised against** Consumer use

### Details of the supplier of the safety data sheet

#### **Supplier Address**

PMC Group Inc.  
1288 Route 73 South  
Mount Laurel, New Jersey 08054  
USA

### 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

**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)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

May cause damage to organs through prolonged or repeated exposure

**Appearance** No information available**Physical state** liquid**Odor** Sulphurous**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Contaminated work clothing should not be allowed out of the workplace  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
 IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink 1 or 2 glasses of water. Get medical advice/attention if you feel unwell.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

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

May be harmful if swallowed. May be harmful in contact with skin. Toxic to aquatic life with long lasting effects. Toxic to aquatic life.  
 Unknown Acute Toxicity 3.02% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Family** Organotin compounds.

Chemical Name	CAS No.	Weight-%	Trade Secret
Tin, Bu 1-dodecanethiol 2-mercaptoethanol thio complexes	210920-40-4	90 - 100	*
2-Ethylhexyl mercaptoacetate	7659-86-1	<2	*
Monobutyltin trichloride	1118-46-3	<2	*

\* The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**First aid measures****Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. 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. (Get medical attention immediately if irritation persists.).

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water.

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<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	
<b>Symptoms</b>	No information available.
<b><u>Indication of any immediate medical attention and special treatment needed</u></b>	
<b>Note to physicians</b>	May cause sensitization of susceptible persons. For inhalation exposure consider treatment for hydrogen sulfide (H <sub>2</sub> S) exposure.

## 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. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** Carbon oxides. Hazardous metal fumes and oxides. 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. Avoid contact with eyes and skin.

### **Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. 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. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

**Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Hydrogen sulfide (H<sub>2</sub>S), a decomposition by-product of this material, may be present in the headspace of the container. Wash thoroughly after handling.

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

Keep out of the reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place. Keep container tightly closed in a dry and well-ventilated place.

**Incompatible materials**

Strong acids, Strong oxidizing agents, Contact with acids may release hydrogen sulfide, a toxic and flammable gas that may form explosive mixtures in air.

## 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
Monobutyltin trichloride 1118-46-3	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 (vacated) S*	-	TWA: 0.07 mg/m <sup>3</sup> 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.

**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**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties****Physical state**

liquid

**Appearance**

No information available

**Color**

yellow

**Odor**

Sulphurous

**Odor threshold**

No information available

**Property****Values****Remarks • Method****pH**

No information available

Not Applicable

Melting point/freezing point	20 °C / -4 °F	
Boiling point / boiling range		
Flash point	114 °C / 237 °F	Tag Closed Cup
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	10.4	
Lower flammability limit:	0.82	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.2038 @ 77 °F	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	495 - 500 °F	
Decomposition temperature	No information available	
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 (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

**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.

**Incompatible materials**

Strong acids, Strong oxidizing agents, Contact with acids may release hydrogen sulfide, a toxic and flammable gas that may form explosive mixtures in air.

**Hazardous Decomposition Products**

Carbon oxides, Hazardous metal fumes and oxides, Hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	The product has not been tested.
<b>Inhalation</b>	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
<b>Eye contact</b>	Irritating to eyes.

**Skin Contact** May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Irritating to skin.

**Ingestion** Reacts with gastric acid to form organotin chlorides.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Tin, Bu 1-dodecanethiol 2-mercaptoethanol thio complexes	= 2500 mg/kg (Rat)	> 2000 mg/kg (Rat)	
2-Ethylhexyl mercaptoacetate	303 - 334 mg/kg (Rat)	> 2000 mg/kg (Rat) OECD 402	0.51 mg/l (LC0, Rat)
Monobutyltin trichloride	= 2300 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

**Skin corrosion/irritation** 1.2/8 (rabbit)  
**Serious eye damage/eye irritation** 4/110 (rabbits)  
**Sensitization** May cause sensitization by skin contact.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.  
**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available  
**STOT - repeated exposure** No information available.  
**Chronic toxicity** Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.  
**Target Organ Effects** blood, Central nervous system, Eyes, kidney, liver, Respiratory system, Skin, Urinary Tract.  
**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 3.02% of the mixture consists of ingredient(s) of unknown toxicity  
**The following values are calculated based on chapter 3.1 of the GHS document .**  
**ATEmix (oral)** 2244 mg/kg  
**ATEmix (dermal)** 2129 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

3.02% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Tin, Bu 1-dodecanethiol 2-mercaptoethanol thio complexes 210920-40-4	= 3.5: 72 h Pseudokirchneriella subcapitata mg/L EL50	> 200: 96 h Oncorhynchus mykiss mg/L LL50		= 8.9: 21 d EL50 Daphnia magna mg/L
2-Ethylhexyl mercaptoacetate 7659-86-1	0.41: 72 h Pseudokirchneriella subcapitata mg/L EC50 (biomass) 0.91: 72 h Pseudokirchneriella subcapitata mg/L EC50 (growth rate)	0.23 mg/l 96 h (Oncorhynchus mykiss (rainbow trout)) 9: 48 h Leuciscus idus mg/L LC50 4.4: 96 h Pimephales promelas mg/L LC50	= 2.7 mg/l	0.38: 48 h (Daphnia magna (Water flea))mg/L EC50
Monobutyltin trichloride 1118-46-3	0.31: 72 h Scenedesmus subspicatus mg/L EC50	> 100: 96 h Danio rerio mg/L LC50	= 135 mg/l	83: 48 h Daphnia magna Straus mg/L EC50

### Persistence and degradability

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
2-Ethylhexyl mercaptoacetate 7659-86-1	2.43

**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
Monobutyltin trichloride 1118-46-3	Toxic

**14. TRANSPORT INFORMATION****DOT** Not regulated**IATA** 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**

<b>EINECS/ELINCS</b>	Does not comply
<b>TSCA</b>	Complies
<b>AICS</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>ENCS</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>NZIoC</b>	Does not comply

**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

### 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**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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>	<b>Health hazards</b> 2	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Physical and Chemical Properties</b> -
<b>HMIS</b>	<b>Health hazards</b> 2*	<b>Flammability</b> 1	<b>Physical hazards</b> 0	<b>Personal protection</b> X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

**Prepared By** PMC Group  
**Issue Date** 23-May-2014  
**Revision Date** 19-Feb-2015

**Revision Note**  
 No information available

#### **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**