



SAFETY DATA SHEET

Issue Date 05-Oct-2014

Revision Date 19-Aug-2015

Version 2

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

Product identifier

Product Name THERMOLITE® 161 STABILIZER

Other means of identification

SDS Code CA_RSQ

Document CA_RSQ

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 Organometallic 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)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Skin sensitization	Category 1B
Germ cell mutagenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements

Harmful if swallowed
Harmful in contact with skin
May cause an allergic skin reaction
Suspected of causing genetic defects
Suspected of damaging fertility or the unborn child
May cause respiratory irritation
Causes damage to organs through prolonged or repeated exposure

**Appearance** clear**Physical state** liquid**Odor** Sulphurous**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific measures (see .? on this label)
 IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing 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 SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

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

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.
 Unknown Acute Toxicity 0.229% 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
Dimethyltin bis(2-ethylhexyl mercaptoacetate)	57583-35-4	71-76	*
Methyltin tris(2-ethylhexyl mercaptoacetate)	57583-34-3	22-27	*
2-Ethylhexyl mercaptoacetate	7659-86-1	1-3	*

* 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

General advice Immediate medical attention is required.

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.
Skin Contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash off immediately with soap and plenty of water.
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.
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.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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.

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. Oxides of sulfur.

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.

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

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.

Packaging materials Keep/store only in original container.

Incompatible materials Acids, 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
Dimethyltin bis(2-ethylhexyl mercaptoacetate) 57583-35-4	STEL: 0.2 mg/m ³ Sn TWA: 0.1 mg/m ³ Sn S*	TWA: 0.1 mg/m ³ Sn (vacated) TWA: 0.1 mg/m ³ Sn (vacated) S*	IDLH: 25 mg/m ³ Sn TWA: 0.1 mg/m ³ except Cyhexatin Sn	-
Methyltin tris(2-ethylhexyl mercaptoacetate) 57583-34-3	STEL: 0.2 mg/m ³ Sn TWA: 0.1 mg/m ³ Sn S*	TWA: 0.1 mg/m ³ Sn (vacated) TWA: 0.1 mg/m ³ Sn (vacated) S*	IDLH: 25 mg/m ³ Sn TWA: 0.1 mg/m ³ 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.

Skin and body protection Wear protective gloves and protective clothing. 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

Physical state	liquid	Odor	Sulphurous
Appearance	clear	Odor threshold	No information available
Color	yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point		
Boiling point / boiling range	> 221 °C / 430 °F	Decomposes
Flash point	150 °C / 302 °F	Setaflash (based on components)
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	<0.5 mmHg @ 25°C (77°F)	
Vapor density	No information available	
Specific Gravity	No information available	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
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	1.17g/cm ³ @25°C (77°F)
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.

Incompatible materials

Acids, Strong oxidizing agents.

Hazardous Decomposition Products

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

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

Product Information	No data available.
Inhalation	May cause irritation.
Eye contact	Irritating to eyes.
Skin Contact	Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact.
Ingestion	Reacts with gastric acid to form organotin chlorides.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyltin bis(2-ethylhexyl mercaptoacetate)	= 1150 - 1710 mg/kg (Rat)	> 1050 mg/kg (Rabbit)	
Methyltin tris(2-ethylhexyl mercaptoacetate)	= 880 - 1261 mg/kg (Rat)	= 1000 - 2150 mg/kg (Rabbit)	
2-Ethylhexyl mercaptoacetate	303 - 334 mg/kg (Rat)	> 2000 mg/kg (Rat) OECD 402	0.51 mg/l (LC0, Rat)

Information on toxicological effects

Symptoms No information available.

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

Sensitization	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. 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	Central nervous system. Immune system.
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

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

ATEmix (oral)	1191 mg/kg
ATEmix (dermal)	1071 mg/kg

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0.229% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea

Dimethyltin bis(2-ethylhexyl mercaptoacetate) 57583-35-4	270: 72 h Selenastrum capricornutum mg/L EC50 (growth rate) 120: 72 h Selenastrum capricornutum mg/L EC50 (biomass)	> 1000: 96 h Pimephales promelas mg/L LC50 static		32: 48 h Daphnia magna Straus mg/L EC50 =1.03: 21 d Daphnia magna mg/L EC50 = 1-10%: 21 d Daphnia magna NOEC
Methyltin tris(2-ethylhexyl mercaptoacetate) 57583-34-3	> 1.8: 72 h Desmodesmo subspicatus mg/L EC50	> 6: 96 h Danio rerio mg/L LC50	> 1000 mg/l	= 2.9: 24 h Daphnia magna Straus mg/L EC50 = 0.31: 21 d Daphnia magna Straus mg/L EC50 = 0.13: 21 d Daphnia magna Straus mg/L NOEC
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

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Dimethyltin bis(2-ethylhexyl mercaptoacetate) 57583-35-4	8.5
Methyltin tris(2-ethylhexyl mercaptoacetate) 57583-34-3	11
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
Dimethyltin bis(2-ethylhexyl mercaptoacetate) 57583-35-4	Toxic
Methyltin tris(2-ethylhexyl mercaptoacetate) 57583-34-3	Toxic

14. TRANSPORT INFORMATION**DOT**

Not regulated

IATA	Regulated. 450 L Limit Per Package.
UN/ID No.	3082
Proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S.
Hazard Class	9
Packing Group	III
Marine Pollutant	This material meets the definition of a marine pollutant
Description	(2-Ethylhexyl thioglycolate)
IMDG	Regulated
IMDG Technical Name	(2-Ethylhexyl thioglycolate)
UN/ID No.	3082
Proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S.
Hazard Class	9
Packing Group	III
Marine pollutant	This material meets the definition of a marine pollutant
Description	(2-Ethylhexyl thioglycolate)

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/NDL	Complies
ENCS	Complies
KECL	Does not comply
PICCS	Complies
IECSC	Complies
NZIoC	Complies
TCSI	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - 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	No
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

NFPA	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2*	Flammability 1	Physical hazards 0	Personal protection X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

Prepared By PMC Group
 Issue Date 05-Oct-2014
 Revision Date 19-Aug-2015

Revision Note
 (M)SDS sections updated 3 14 15

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