pmc organometallix

SAFETY DATA SHEET

Issue Date 18-Mar-2014 **Revision Date** 24-Aug-2018 **Version** 12

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

Product identifier

Product Name **THERMOLITE® - Series STABILIZER ; 890, 890F, 890F-LV, 892, 892WF**

Other means of identification

SDS Code VL_T890F
Document CA_POC; CA_POD; CA_RLF; CA_RLS; CA_RJM; CA_ROD
Synonyms Monooctyltin 2-Ethylhexylmercaptoacetate, (dioctyltin bis (2-ethylhexyl mercaptoacetate)

Recommended use of the chemical and restrictions on use

Recommended Use Stabilizer.
Uses advised against Note REACH - Annex XVII #20
Biocidal Products (e.g. disinfectants, pest control)
Consumer use
Plastic products: Toys
SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU21 - Consumer uses: Private households (= general public = consumers)

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
Emergency Telephone Chemtrec: 1-800-424-9300 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 sensitization	Category 1B
Specific target organ toxicity (single exposure)	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements
May cause an allergic skin reaction
May cause damage to organs
Causes damage to organs through prolonged or repeated exposure

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

Precautionary Statements - Prevention
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - Response
Specific treatment (see on this label)
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Precautionary Statements - Storage
Store locked up.

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. Causes mild skin irritation. Harmful to aquatic life with long lasting effects. Combustible liquid.
Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical Name	CAS No	Weight-%	Trade Secret
Octyltin tris(2-ethylhexyl mercaptoacetate)	27107-89-7	25-65	*
Dioctyltin bis(2-ethylhexyl mercaptoacetate)	15571-58-1	30-75	*
Dioctyltin mercaptoacetate	15535-79-2	1-5	*
2-Ethylhexyl mercaptoacetate	7659-86-1	<2	*
2-Ethylhexanol	104-76-7	<2	*

*The percentage listed represents batch to batch variability in the product of this product; it does not represent any specification.

4. FIRST AID MEASURES

First aid measures

General advice If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

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. If symptoms persist, call a physician.

Skin Contact Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. 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. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician. 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. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Use personal protective equipment as required.

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. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors. 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 Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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 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. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up.

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 strong acids and bases, Strong oxidizing agents, Incompatible with 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/m³ Sn TWA: 0.1 mg/m³ Sn S*	TWA: 0.1 mg/m³ Sn (vacated) TWA: 0.1 mg/m³ Sn (vacated) S*	IDLH: 25 mg/m³ Sn TWA: 0.1 mg/m³ except Cyhexatin Sn	-
Octyltin tris(2-ethylhexyl mercaptoacetate) 27107-89-7	STEL: 0.2 mg/m³ Sn TWA: 0.1 mg/m³ Sn S*	TWA: 0.1 mg/m³ Sn (vacated) TWA: 0.1 mg/m³ Sn (vacated) S*	IDLH: 25 mg/m³ Sn TWA: 0.1 mg/m³ except Cyhexatin Sn	-
Dioctyltin mercaptoacetate 15535-79-2	STEL: 0.2 mg/m³ Sn TWA: 0.1 mg/m³ Sn S*	TWA: 0.1 mg/m³ Sn (vacated) TWA: 0.1 mg/m³ Sn (vacated) S*	IDLH: 25 mg/m³ Sn TWA: 0.1 mg/m³ 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 protective gloves and protective clothing.

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. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid		
Appearance	clear	**Odor**	characteristic
Color	yellow to amber	**Odor threshold**	No information available

Property	**Values**	**Remarks • Method**
pH	Not applicable	Not applicable
Melting point / freezing point	-40 °C / -40 °F	
Boiling point / boiling range	> 200 °C / 392 °F	Decomposes
Flash point	126-129 °C / 258-264 °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	No information available	
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	Not an explosive	
Oxidizing properties	Not applicable	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	1
Density	No information available
Bulk density	No information available
Solubility(ies)	Heptane isomers

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

Incompatible materials
Incompatible with strong acids and bases, Strong oxidizing agents, Incompatible with 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

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

Eye contact Irritating to eyes.

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

Ingestion Reacts with gastric acid to form organotin chlorides.

Component Information

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)	
Dioctyltin mercaptoacetate	= 943 mg/kg (Rat)		
2-Ethylhexanol	= 3730 mg/kg (Rat)	> 3000 mg/kg (Rat) > 2600 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms No information available.

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

Sensitization May cause sensitization of susceptible persons.
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, Thymus.
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) 2020 mg/kg
ATEmix (dermal) 4166 mg/kg
ATEmix (inhalation-vapor) 148.1 mg/l

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	Crustacea

			microorganisms	
Dioctyltin bis(2-ethylhexyl mercaptoacetate) 15571-58-1	= 0.17: 72 h Desmodesmus subspicatus mg/L EC50	= 93.2: 96 h Brachydanio rerio mg/L LC50 semi-static = 24.8: 96 h Danio rerio mg/L LC50	> 100 mg/l	= 0.17 - 0.18: 48 h Daphnia magna mg/L EC50 > 3.2: 21 d Daphnia magna mg/L EC50
Octyltin tris(2-ethylhexyl mercaptoacetate) 27107-89-7	= 0.71: 72 h Desmodesmus subspicatus mg/L EC50 > 0.0088: 72 h Pseudokirchneriella subcapitata mg/L EC0	= 73: 96 h Brachydanio rerio mg/L LC50 semi-static > 0.945: 96 h Cyprinus carpio mg/L	> 100 mg/l	= 1: 48 h Daphnia magna mg/L EC50 = 0.023 - 0.039: 48 h Daphnia magna mg/L EC50 = 0.228: 21 d Daphnia magna mg/L EC50 = 0.036: 21 d Daphnia magna mg/L NOEC
2-Ethylhexanol 104-76-7	11.5: 72 h Desmodesmus subspicatus mg/L EC50	32 - 37: 96 h Oncorhynchus mykiss mg/L LC50 static 7.5: 96 h Oncorhynchus mykiss mg/L LC50 27 - 29.5: 96 h Pimephales promelas mg/L LC50 flow-through 29.7: 96 h Pimephales promelas mg/L LC50 static 10.0 - 33.0: 96 h Lepomis macrochirus mg/L LC50 static	24h NOEC > 300 mg/l	39: 48 h Daphnia magna mg/L EC50
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
2-Ethylhexyl mercaptoacetate 7659-86-1	4.7
2-Ethylhexanol 104-76-7	3.1

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
Octyltin tris(2-ethylhexyl mercaptoacetate) 27107-89-7	Toxic

Dioctyltin bis(2-ethylhexyl mercaptoacetate) 15571-58-1	Toxic
Dioctyltin mercaptoacetate 15535-79-2	Toxic

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated. Not regulated.
Proper shipping name Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

All of the components in the product are on the following Inventory lists
Canada DSL.

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 Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Ethylhexanol 104-76-7		X	X

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	**Health hazards** 2	**Flammability** 2	**Instability** 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** 2*	**Flammability** 2	**Physical hazards** 0	**Personal protection** X

Chronic Hazard Star Legend * = *Chronic Health Hazard*

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Revision Note
(M)SDS sections updated 9

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