



# SAFETY DATA SHEET

Issue Date 29-Jul-2014

Revision Date 09-Dec-2014

Version 3

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

### Product identifier

**Product Name** ADVASTAB™ TM-900F HEAT STABILIZER

### Other means of identification

**SDS Code** TM-900F  
**Document** TM-900F; CA\_DFQ  
**Synonyms** None  
**Registration Number(s)** EPA Accession Number 234594

### 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)

Acute toxicity - Oral	Category 4
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

### Label elements

#### Emergency Overview

#### Warning

#### Hazard statements

Harmful if swallowed  
Suspected of damaging fertility or the unborn child  
May cause 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  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

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

**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 in contact with skin. May be harmful if inhaled. Very toxic to aquatic life.  
 Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Family** Organotin compounds.  
**Chemical nature** Tin organic compounds.

Chemical Name	CAS No.	Weight-%	Trade Secret
Fatty acids, C16-18 and C18-unsatd., 2-mercaptoethyl esters, reaction products with dichlorodimethylstannane, sodium sulfide (Na <sub>2</sub> S) and trichloromethylstannane	ACCN 234594	100	*

\* 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** 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.

<b>Eye contact</b>	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.
<b>Skin Contact</b>	Consult a physician if necessary. 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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. 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>	For inhalation exposure consider treatment for hydrogen sulfide (H <sub>2</sub> S) exposure. 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** Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

### **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.

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

**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** 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.

**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.

**Incompatible materials** Bases, Strong reducing agents, Acids, 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
Fatty acids, C16-18 and C18-unsatd., 2-mercaptoethyl esters, reaction products with dichlorodimethylstannane, sodium sulfide (Na <sub>2</sub> S) and trichloromethylstannane ACCN 234594	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 (12 hour)

**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. Avoid breathing (dust, vapor, mist, gas). Wash face, hands and any exposed skin thoroughly after handling. Use personal protective equipment as required. 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**

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

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No information available	Not Applicable
<b>Melting point/freezing point</b>		
<b>Boiling point / boiling range</b>	216 °C / 421 °F	
<b>Flash point</b>	> 180 °C / > 356 °F	Setaflash
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	0.02 kPa at 25 °C	Calculation method
<b>Vapor density</b>	No information available	
<b>Specific Gravity</b>	1.13	
<b>Water solubility</b>	slightly soluble	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	log Kow = 25.5	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	1357.3 g/mol
<b>VOC Content (%)</b>	0
<b>Density</b>	No information available
<b>Bulk density</b>	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**

Bases, Strong reducing agents, Acids, 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, Oxides of sulfur.

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

**Product Information**

**Inhalation** May cause irritation.

**Eye contact** Contact with eyes may cause irritation.

**Skin Contact** May cause irritation. 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.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Fatty acids, C16-18 and C18-unsatd., 2-mercaptoethyl esters, reaction products with dichlorodimethylstannane, sodium sulfide (Na <sub>2</sub> S) and trichloromethylstannane	= 300 - 2000 mg/kg bw (Rat)	>2000 mg/kg bw	>200 mg/L

**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 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, kidney, Central nervous system, Eyes, liver, Respiratory system, Skin, Urinary Tract.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% 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)** 1000 mg/kg

**ATEmix (dermal)** 1001 mg/kg

**ATEmix (inhalation-dust/mist)** 201 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Fatty acids, C16-18 and C18-unsatd., 2-mercaptoethyl esters, reaction products with dichlorodimethylstannane, sodium sulfide (Na <sub>2</sub> S) and trichloromethylstannane ACCN 234594	= 0.64 mg/L 72 h EC50 = 0.28 mg/L NOEC Pseudokirchneriella subcapitata	0.1-1 mg/L 96 h LC50 Oncorhynchus mykiss		0.1-1 mg/L 48 h EC50 D. magna

**Persistence and degradability**  
 NOT READILY BIODEGRADABLE.

**Bioaccumulation**  
 No information available.

Chemical Name	Partition coefficient
Fatty acids, C16-18 and C18-unsatd., 2-mercaptoethyl esters, reaction products with dichlorodimethylstannane, sodium sulfide (Na <sub>2</sub> S) and trichloromethylstannane ACCN 234594	25.5

**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. Do not release this product, or any waste stream from manufacturing, processing, and use containing this product, into the waters of the United States that would result in surface water concentrations exceeding 0.5 parts per billion (ppb) cumulative concentration.

**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
Fatty acids, C16-18 and C18-unsatd., 2-mercaptoethyl esters, reaction products with dichlorodimethylstannane, sodium sulfide (Na <sub>2</sub> S) and trichloromethylstannane ACCN 234594	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  
**Description** (Dimethyltin compound)

**IMDG** Regulated  
**IMDG Technical Name** (Dimethyltin compound)  
**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** (Dimethyltin compound)

## 15. REGULATORY INFORMATION

### SIGNIFICANT NEW USE RULE (SNUR)

This product contains a chemical which is subject to a Significant New Use Rule (SNUR) 40 CFR 721.63 (a)(1), (a)(2)(i) to (iv), (a)(3), (b) (concentration set at 1.0%), and (c); 721.72 (a) through (e) (concentration set at 1.0%), (f), (g)(1)(i)-(v) and (viii)-(ix), (g)(2)(i)-(iii) and (v), (g)(3)(i)-(ii), (g)(4)(i), (g)(5); 721.80 (j); and 721.90(a)(4), (b)(4), and (c)(4) (N=0.5).

**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>TSCA</b>	Complies
<b>AICS</b>	Does not comply
<b>DSL/NDSL</b>	Complies
<b>ENCS</b>	Complies
<b>KECL</b>	Complies
<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** 29-Jul-2014  
**Revision Date** 09-Dec-2014

**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**