

**Thermolite® 890F**  
Octyltin PVC Heat Stabilizer

**DESCRIPTION**

Used in PVC calendering, extrusion and injection to produce films, sheets, bottles, pipes and fittings. Thermolite 890F can provide outstanding transparency and low odor performance.

**GENERAL CHARACTERISTICS**

Attributes	Typical Values
Appearance	Liquid
Color	Colorless to Slightly Yellow
% Tin	15.3
% Mercapto Sulphur	9.2
% Chloride	0.4 (max.)
Gardner Color	2 (max.)
% Monooctyltin	29
% LOD	4.0 (max)

**APPLICATIONS & FEATURES**

**Thermolite® 890F** is recommended for use as heat stabilizer in many rigid PVC applications. It contains an optimized combination of di and mono octyl tin thioester specially adapted to high shear applications such as calendering, injection molding and fittings or pipe extrusion.

In addition to its outstanding stabilizing efficiency, it has a low level of volatiles which will help to reduce odor both during processing and in the final products.

**Thermolite® 890F** allows PVC to be transformed at high process temperatures, avoiding thermal degradation. It produces finished products with the highest transparency. It is recommended to be used in PVC at 1.0-2.0 phr. It is also compatible with other co-stabilizers, even at lower dosage, depending upon the working conditions and the required final vinyl product properties.

**Thermolite® 890F** is commonly used in PVC formulations for food or pharmaceutical packaging. Dedicated information on regulatory status is available upon request.

**PACKAGING & STORAGE**

Available in 200kg Drums, 2600lb Totes or 1000kg Intermediate Bulk Container (IBC).

We recommend that the material is stored in a cool, dry environment in a tightly closed container and used within 6 months after delivery.

**In US**  
Customer Service  
1.855.638.2549  
Fax 1.855.289.2885

**In Europe**  
Customer Service  
33(0)3.91.83.71.56  
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**STARTING FORMULA RECOMMENDATIONS**

<b>Food Contact Grade PVC Bottle</b>	<b>Use Level (phr)</b>
PVC Resin (K-57)	100.0
<b>Thermolite® 890F</b>	1.5 – 2.0
Internal Lubricant	1.5 – 2.0
External Lubricant	0.1 – 0.2
Acrylic Process Aid	1.5 – 2.0
Acrylic Process Aid (Metal Release)	0.5 – 5.0
MBS Impact Modifier	12.0 – 15.0
Toner	As Required

<b>Food Contact Grade Sheet</b>	<b>Use Level (phr)</b>
PVC Resin (K-60)	100.0
<b>Thermolite® 890F</b>	1.2 – 1.5
Internal Lubricant	1.2 – 1.5
External Lubricant	0.1 – 0.5
EVA Co-Polymer	0.0 – 3.0
Acrylic Process Aid	1.5 – 2.0
Acrylic Process Aid (Metal Release)	0.7 – 1.0
MBS Impact Modifier	6.0 – 12.0
Toner	As Required



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## ENVIRONMENTAL AND SAFETY INFORMATION

BEFORE HANDLING THIS MATERIAL, READ AND UNDERSTAND THE MSDS (MATERIAL SAFETY DATA SHEET) FOR ADDITIONAL INFORMATION ON PERSONAL PROTECTIVE EQUIPMENT AND FOR SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION. For Environmental, Safety & Toxicology information, contact our Customer Service Department at 1-855-638-2549 (1-855-METALIX) to request a Material Safety Data Sheet.

## MORE TECHNICAL INFORMATION AVAILABLE

Ask your PMC account manager for further information about other high quality PMC plastics additives for use in PVC resins, PVC alloys and other polymer systems. PMC offers its **Center for Vinyl Innovation (CVI)** where our field experienced Technical staff maintains a full array of PVC testing capabilities to assist vinyl processors solve a range of formulation and processing problems. Set up a visit at the CVI to learn more about how PMC's technologists can help improve your vinyl processing applications.

## PMC ORGANOMETALLIX THERMOLITE® AND ADVASTAB® HEAT STABILIZERS

PMC Organometallix offers a full range of Methyltin, Butyltin and Octyltin heat stabilizers. Our **Thermolite®** and **ADVASTAB®** heat stabilizers are designed for use in the production of rigid, semi-rigid, and cellular PVC products. Organometallix has developed PVC heat stabilizers specifically for extruded siding, profiles and pipe, injection molding, blow molded bottles and calendered or extruded sheet. Organometallix offers a full line of stabilizers that meet FDA requirements for food contact grade PVC packaging as well as a full line of NSF authorized stabilizers for PVC potable water pipe & fittings.

## PMC BIOGENIX ADVAPAK®, ADVALUBE®, ADVAWAX®, KEMAMIDE® AND KEMESTER® LUBRICANTS

PMC Biogenix offers a wide range of metallic stearates, specialty lubricants and other additives designed all grades of polymer processing, including PVC pipe and profile extrusions, compounding, film and sheet and injection-molding applications. Biogenix brands are widely recognized. **ADVAWAX®** synthetic waxes are used in bottles, films and cellular PVC profile extrusions. **ADVALUBE®** specialty ester-based internal and external lubricants are designed for rigid PVC profile extrusion, calendered film and sheet, and blow molding applications. **ADVAPAK®** is family of multi-functional one-pack systems (OPS) combining heat stabilizer and lubricant technology designed for efficient extrusion of all types of PVC pipe and moldings. **Kemamide®** synthetic waxes find uses as slip agents and anti-block additives that provide excellent bloom control and secondary mold-release in polyolefins and engineering polymers such as nylon, PS and ABS and **Kemester®** lubricants are a range of glycerol esters and specialty esters that function as boundary lubricants, mold-release agents, emulsifiers, anti-stats, anti-fogs, and emollients in automotive plastics, etc.

## PMC CRYSTAL BAION® AND CRYSTALWAX® LUBRICANTS

PMC Crystal manufactures **Baion®** and **CrystalWax®**, a broad range of standard paraffin and polyethylene wax blends along with options of including specialty lubricants produced by PMC Biogenix. Crystal lubricants are also available in custom formulations to meet specific customer requirements. Several **Baion®** products are fully authorized by NSF for use in PVC potable water systems. **Baion®** and **CrystalWax®** products find uses in PVC siding, window profiles, fencing, decking and trim applications to highlight a few.



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