

Thermolite® 137

Butyltin PVC Heat Stabilizer

Description

Thermolite 137 is a sulfur-containing butyltin stabilizer. It is suitable for both single and multiple-screw extrusion systems. Thermolite 137 is especially designed for weatherable applications such as siding and window profiles.

General Characteristics

Properties	Typical Values
Form	Clear Liquid
Color (Gardner)	3
Viscosity, cs (@25°C)	50
Specific Gravity (@25°C)	1.04
Refractive Index (@25°C)	1.498
% Tin	14

Benefits

Thermolite 137 is designed as a multi-purpose stabilizer that can withstand the rigors of single-screw extrusion as well as provide excellent performance in multi-screw processing. It is also recommended for injection molding. Advantages include:

- Easy blending and dispersion.
- Good initial color.
- Good long-term stability.
- Easy processing of regrind.
- Slightly lubricating.
- Outstanding color hold and weathering characteristics.

Applications

Thermolite 137 can be used for a wide variety of PVC applications but is particularly well suited for extrusion of profile, siding and injection molding.

Packaging

Thermolite 137 heat stabilizer is available in 2500 lb totes.

In US

PMC Organometallix, Inc.
The PMC Group Building
1288 Route 73, Suite 401
Mount Laurel, NJ 08054

Customer Service
1.855.638.2549
(1.855.METALIX)
Fax 1.856.638.2157

In Europe

PMC Vlissingen B.V.
C/o PMC OUVRIE
44 rue Albert Einstein
62220 CARVIN
FRANCE

Customer Service
33(0)3.91.83.71.56
Fax 33(0)3.91.83.71.92

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Starting Formulation Recommendations

Typical Siding Profile Formulation	Use Level (phr)
PVC Resin (K-65)	100.0
Thermolite 137	1.5 – 2.5
Titanium Dioxide	10.0 – 12.0
Acrylic Impact Modifier	5.0
Acrylic Process Aid	0.7 – 1.0
Calcium Stearate	1.5 – 2.0
Paraffin Wax (165°F mp)	0.8 – 1.0

Typical Injection Molding Formulation	Use Level (phr)
PVC Resin (K-65)	100.0
Thermolite 137	1.5 – 2.5
Acrylic Process Aid	0.7 – 1.4
Titanium Dioxide	1.0
Calcium Carbonate	3.0
Calcium Stearate	3.0 – 5.0
ADVALUBE™ F-1040L	0.5 – 0.8
Paraffin Wax (165°F mp)	0.3 – 0.5

Safety and Handling

Thermolite 137 stabilizer may be handled with the same normal precautions as other butyltin mercaptide stabilizers and organic liquids. In case of contact with skin, thoroughly wash with soap and water. In case of contact with eyes, flush with water and get medical attention immediately. Use with adequate ventilation and avoid excessive or prolonged exposure to the vapors.

Indoor storage is recommended. Iron or non-stainless steel should be avoided for piping, valves, and pumps. Teflon® gaskets are recommended. No part of the stabilizer handling system wetted by liquid should contain copper.



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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 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 recognised. **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 NFS 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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