

Thermolite® 380

Butyltin PVC Heat Stabilizer

Description

Thermolite 380 is a high efficiency butyltin mercaptide PVC heat stabilizer created for today's high output extrusion. It is designed for co-extruded siding, window profiles and other demanding rigid PVC applications that require high performance, consistent stabilization, superior weathering and excellent color-hold properties. Thermolite 380 heat stabilizer can be used under a wide range of processing conditions.

General Characteristics

Properties	Typical Values
Form	Clear Oily Liquid, Pale Yellow
Color (Gardner)	1
Viscosity, cs (@25°C)	335
Specific Gravity (@25°C)	1.20
Refractive Index (@25°C)	1.55
% Tin	24.8
% Mercapto Sulfur	18.7

Benefits

The advantages of using Thermolite 380 heat stabilizer in PVC formulations include:

- Excellent cost/performance ratio.
- Excellent lubricity leading to stable, high output extrusion.
- Superior outdoor weathering properties.
- Excellent initial and long term color hold.
- Outstanding dynamic term stability.
- Low amperage and back pressure for high extrusion rates.

Applications

Thermolite 380 heat stabilizer can be used in many rigid PVC applications. It has proven to be especially effective for use in co-extruded siding and window profiles. It has the versatility to be used in substrate and topcoat formulations, eliminating the need for a second stabilizer. Thermolite 380 heat stabilizer can be effectively used at low levels, thereby improving heat distortion temperatures.

Packaging

Thermolite 380 heat stabilizer is available in drums and totes.

In US

PMC Organometallics, Inc.
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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

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Typical Formulation

Weatherable Profile	Use Level (phr)
PVC Resin (K-67)	100.0
Thermolite 380	0.6 – 0.9
Calcium Stearate	1.2 – 1.5
Paraffin Wax (165°F mp)	1.0 – 1.2
Acrylic Process Aid	0.7 – 1.0
Acrylic Process Aid (Metal Release)	0.3 – 0.5
Acrylic Impact Modifier	5.0 – 6.0
Calcium Carbonate (0.8 µm)	0.0 – 5.0
Titanium Dioxide	10.0

Safety and Handling

Thermolite 380 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 Organometallix account manager for further information about other high quality PMC Organometallix's additives for use in PVC resins, PVC alloys and other polymer systems. PMC Organometallix produces a full line of heat stabilizers. In addition, PMC Organometallix's Technical Service staff is available to assist compounders and processors to solve formulation and processing problems.

Thermolite® and ADVASTAB™ Heat Stabilizers

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

ADVAPAK™, ADVALUBE™ and ADVAWAX™ for Rigid PVC Lubrication

Organometallix offers a wide range of performance lubricants for PVC processing. ADVALUBE™ and ADVAWAX™ include every lubricant class from esters to amides to paraffin waxes. ADVAPAK™ lubricants are custom formulations to meet specific customer requirements. ADVALUBE™, ADVAWAX™ and ADVAPAK™ products find uses in PVC pipe, siding, window profiles, film and sheet, molding, fencing, decking and trim applications.

Biogenix Lubricants

PMC Biogenix's lubricants include Calcium, Zinc, Lithium, and Magnesium stearates that meet FDA requirements for food grade PVC packaging as well as NSF requirements for PVC potable water pipes & fittings. Our PVC lubricants such as Industrene®, Hystrene®, Kemester®, Kemamide® and heat stabilizers together offer a comprehensive PVC package for production of rigid, semi-rigid, foamed, and flexible PVC applications such as extrusion molding, injection molding, blow molding, calendering, siding, profiling, piping etc.

CrystalWax for Rigid PVC Lubrication

Crystal manufactures a broad range of standard blends utilizing paraffin and polyethylene waxes along with the option of blending EBS, GMS and other lubricating esters produced by PMC Biogenix. CrystalWax lubricants are also available in custom formulations to meet specific customer requirements. CrystalWax formulations find uses in PVC siding, window profiles, fencing, decking and trim applications to highlight a few.



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