

ADVASTAB® TM-694 Methyltin Heat Stabilizer

DESCRIPTION

ADVASTAB® TM-694 heat stabilizer is a unique low cost liquid reverse ester methyltin stabilizer which offers significant cost and performance advantages in a variety of rigid vinyl formulations. Its unique chemistry provides excellent early color stability leading to unsurpassed color hold in all applications of vinyl extrusions. The excellent cost-performance of **ADVASTAB® TM-694** stabilizer has made it the industry standard for the processing of vinyl pipe.

GENERAL CHARACTERISTICS

Properties	Typical Values
Specific Gravity (@25°C)	1.00
Weight, lb/gal (@25°C)	8.3
Viscosity, cs (@25°C)	60
Pour Point, °C	0
Cloud Point, °C	-10
% Tin	6.5
% Mercaptan Sulfur	10.7
Acid Value	4.0 (max.)
Color (Gardner)	7 (max.)
Appearance	Clear Liquid*

*A slight haze may develop and settle with time.

APPLICATIONS AND FEATURES

Specifically optimized state-of-the-art reverse ester chemistry for efficient, cost-effective, trouble-free extrusions of vinyl articles. Recommended for all single and multi-screw extrusions of potable water, DWV, sewer, electrical conduit, and irrigation pipes. **ADVASTAB® TM-694** stabilizer is fully approved by both NSF and PPI for uses in potable water pressure pipes under the PPI-Vinyl Generic Range Formulation at dosages of 0.3 to 1.0 phr. Recommended for uses in many rigid vinyl extrusions such as rigid interior profiles. Fully compatible with nearly all of the commonly used processing aids and impact modifiers used commercially in vinyl extrusion compounds. **ADVASTAB® TM-694** stabilizer has proven itself over and over again to manufacture every size of vinyl from 1/2 inch to 36 inch pressure pipes

PACKAGING

Available in Totes or Intermediate Bulk Container (IBC).

In US

Customer Service
1.855.638.2549
Fax 1.855.289.2885

In Europe

Customer Service
33(0)3.91.83.71.56
Fax 33(0)3.91.83.71.91

www.pmc-group.com

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TYPICAL APPLICATION FORMULATIONS

Potable Water Pipe	Use Level (phr)
Resin (K-65)	100.0
ADVASTAB® TM-694	0.4 - 0.8
PMC Biogenix Calcium Stearate	0.4 - 0.8
CrystalWax® 2054 (165°F mp)	0.8 - 1.2
Oxidized Polyethylene Wax	0.1 - 0.2
Calcium Carbonate (0.8 µm)	0.5
Titanium Dioxide	0.5 - 1.0

Sewer Pipe	Use Level (phr)
Resin (K-65)	100.0
ADVASTAB® TM-694	0.4 - 0.6
PMC Biogenix Calcium Stearate	0.6 - 0.8
CrystalWax® 2054 (165°F mp)	1.2 - 1.5
Oxidized Polyethylene Wax	0.1 - 0.2
Acrylic Impact Modifier	2.0
Calcium Carbonate (0.8 µm)	10.0 - 30.0
Titanium Dioxide	0.75 - 1.0

Siding Substrate	Use Level (phr)
PVC Resin (K-65)	100.0
ADVASTAB® TM-694	0.8 - 1.2
PMC Biogenix Calcium Stearate	1.0 - 1.5
CrystalWax® 2054 (165°F mp)	1.0 - 1.5
Oxidized Polyethylene Wax	0.1 - 0.2
Acrylic Impact Modifier	4.0 - 5.0
Calcium Carbonate	7.0 - 18.0
Titanium Dioxide	0.5 - 1.0

SAFETY & HANDLING

ADVASTAB® TM-694 stabilizer may be handled with the same normal precautions as other methyltin 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.

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