



Arnitel® E1-Heat

Envalior - Copolyester Elastomer (Ether)

General Information

Product Description

Heat Stabilizing Masterbatch, 30% Active heat stabilizing ingredients, TPC based

Envalior offers a complete portfolio of thermoplastic polyester elastomers. These materials, sold under the trade name Arnitel®, combine excellent flexibility at low temperatures (down to -50°C) with good heat resistance. For critical applications, the heat resistance can be further improved by using the Arnitel® E1-HEAT masterbatch. Standard Arnitel® grades have sufficient heat stability for most applications, however some applications like hoses, beltings or seals and gaskets may require an improved heat stability. Arnitel® U and Arnitel® C grades, Envalior's thermoplastic polyetherester elastomers with standard heat resistance above 3000 hours at 150°C, need no additional heat stabilization. The figure on the next page shows the reference heat stability and the effect of adding 2.5% of Arnitel® E1-HEAT. In the graphs, the effect of thermo-oxidative ageing at different temperatures (x-axis) on the half life time (HLT) of the elongation at break of ISO 527 1BA tensile bars is given. HLT is defined as the time point where the elongation is 50% of the original value. Arnitel® E1-HEAT can be used for injection molding and extrusion applications. It is based on an Arnitel® carrier and shows good dispersion in any Arnitel® type. Arnitel® E1-HEAT can be used in natural and colored applications. For non-black applications, some discoloration as a result of the stabilizing package has to be taken into account.

Not recommended to use in Food contact applications.

General

Material Status	• Commercial: Active				
Availability	• Africa & Middle East	• Europe	• North America		
• Asia Pacific	• Latin America				
Additive	• Heat Stabilizer: 30%				
Features	• Heat Stabilized				
Uses	• Masterbatch				
Resin ID	• Copolyetherester				

Properties ¹

Thermal	Nominal Value	Unit
Melting Temperature	293 to 320	°F
Additional Information	Nominal Value	Unit
Usage	1.5 to 3.0	%

Notes

¹ Typical properties: these are not to be construed as specifications.

