Bergaflex™ BFI K 45A-3E836

Thermoplastic Elastomer

Key Characteristics

Product Description			
Bergaflex BFI K 45A-3E836 is an easy processing TPE, compatabilized to provide excellent adhesion to polyamide polymers. Material is filled, opaque and has therefore a moderate high density.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Europe		
Features	• General Purpose	• Good Adhesion	
Uses	• Appliances • Automotive Applications	• Consumer Applications • General Purpose	• Industrial Applications
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.10 g/cm³	1.10 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (Break)	537 psi	3.70 MPa	ISO 37
Tensile Elongation (Break)	290 %	290 %	ISO 37
Compression Set (158°F (70°C), 22 hr)	79 %	79 %	ISO 815
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	45	45	ISO 48-4
Additional Information			
Properties are measured using injection molded plaques.			

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	212 °F	100 °C
Drying Time	2.0 hr	2.0 hr
Rear Temperature	356 to 374 °F	180 to 190 °C
Middle Temperature	374 to 410 °F	190 to 210 °C
Front Temperature	401 to 464 °F	205 to 240 °C
Nozzle Temperature	410 to 464 °F	210 to 240 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Fast	Fast
Back Pressure [2]	290 to 1450 psi	2.00 to 10.0 MPa
Screw Speed	40 to 100 rpm	40 to 100 rpm

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Injection Notes

Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).

Bergaflex™ BFI K 45A-3E836 has excellent melt stability. Maximum residence times may vary, depending on the size of the barrel. Generally, the barrel should be emptied if it is idle for periods of 8 - 10 minutes or longer.

In general, the fill time should not be more than 1-2 seconds.

Notes

[1] Typical values are not to be construed as specifications.

[2] If color masterbatches are used, higher back pressure is necessary.

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