



Bergaflex™ BFI F 50A-3E1187 Transparent SO

Thermoplastic Elastomer

Key Characteristics

Product Description

Bergaflex™ BFI F 50A-3E1187 Transparent SO is an easy processing, general purpose TPE designed for a wide variety of applications, and may be appropriate where FDA and EU 10/2011 compliances are required.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Food Contact Acceptable	• General Purpose	• Good Processability
Agency Ratings	• EU 10/2011 ¹	• FDA 21 CFR 177.1210 ¹	• FDA 21 CFR 177.2600 ¹
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ²

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.880	0.880	ISO 1183
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength (Break, 73°F (23°C))	725 psi	5.00 MPa	ISO 37
Tensile Elongation (Break, 73°F (23°C))	650 %	650 %	ISO 37
Tear Strength ³ 73°F (23°C), 0.0787 in (2.00 mm)	85.7 lbf/in	15.0 kN/m	ISO 34-1
Compression Set 73°F (23°C), 72 hr	17 %	17 %	ISO 815
158°F (70°C), 23 hr	39 %	39 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	50	50	ISO 7619

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	338 to 347 °F	170 to 175 °C
Middle Temperature	347 to 374 °F	175 to 190 °C
Front Temperature	374 to 428 °F	190 to 220 °C
Nozzle Temperature	383 to 428 °F	195 to 220 °C
Mold Temperature	86 to 122 °F	30 to 50 °C
Back Pressure ⁴	290 to 1450 psi	2.00 to 10.0 MPa
Screw Speed	40 to 100 rpm	40 to 100 rpm

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).

Drying is not Required

Injection Speed: 1 to 3 in/sec

1st Stage - Boost Pressure: 350 to 900 psi

2nd Stage - Hold Pressure: 30% of Boost

Hold Time (Thick Part): 3 to 10 sec

Hold Time (Thin Part): 1 to 3 sec

Notes

¹ Product rating may be influenced by end product design and/or conditions of use. Please contact GLS Thermoplastic Elastomers for information addressing EU (EU, 10/2011) and FDA (21 CFR 177.1210 and 177.2600) compliance.

² Typical values are not to be construed as specifications.

³ Method Ba, Angle (Unnicked), 20 in/min (500 mm/min)

⁴ If color materbatches are used, higher back pressure is necessary.

The logo for PolyOne, featuring the word "PolyOne" in a stylized, italicized serif font with a trademark symbol (TM) to the right.

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