Bergaflex™ BFI 50A-3E1187 Black SO

Thermoplastic Elastomer

Key Characteristics

Product Description			
Bergaflex™ BFI 50A-3E1187 Black SO is an easy processing, general purpose TPE designed for a wide variety of applications.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• Good Processability	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

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 [2]			ISO 34-1
73°F (23°C), 0.0787 in (2.00 mm)	85.7 lbf/in	15.0 kN/m	
Compression Set			ISO 815
73°F (23°C), 72 hr	17 %	17 %	
158°F (70°C), 23 hr	39 %	39 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	50	50	ISO 48-4

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 [3]	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).

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] Typical values are not to be construed as specifications.

[2] Method Ba, Angle (Unnicked), 20 in/min (500 mm/min)

[3] If color materbatches are used, higher back pressure is necessary.

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