Bergaflex™ BFI 50A-316 Black UV

Thermoplastic Elastomer

Key Characteristics

Product Description		
Bergaflex BFI 50A-316 UV is a general purpose TPE. The material is filled and has therefore a high density.		
General		
Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East	• Europe
Features	• General Purpose • Good Processability	• Good Processing Stability • UV Resistant
Uses	• Consumer Applications	• General Purpose
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 (73°F (23°C), Black)	1.17 g/cm³	1.17 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2]			DIN 53504
Break, 73°F (23°C), 0.0787 in (2.00 mm)	870 psi	6.00 MPa	
Tensile Elongation [2]			DIN 53504
Break, 73°F (23°C), 0.0787 in (2.00 mm)	800 %	800 %	
Compression Set			ISO 815
73°F (23°C), 72 hr	17 %	17 %	
158°F (70°C), 22 hr	49 %	49 %	
212°F (100°C), 22 hr	80 %	80 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	50	50	ISO 48-4
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Generic Material Type	Styrenic Thermoplastic Elastomer (TES)	Styrenic Thermoplastic Elastomer (TES)	

Properties are measured using injection molded plaques.

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	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).

Regrind levels up to 20% can be used with Bergaflex™ BFI 50A-316 with minimal property losses, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should be as low as possible. The final determination of regrind effectiveness should be determined by the customer.

Bergaflex BFI 50A-316 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.

Drying is not Required

Notes

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

[2] 7.9 in/min (200 mm/min)

CONTACT INFORMATION

North America
Avon Lake, United States
33587 Walker Road
Avon Lake, OH, United States , 44012
+1 440 930 1000
+1 844 4AVIENT

South America
Sao Paulo, Brazil
Av. Francisco Nakasato, 1700
13295-000 Itupeva
Sao Paulo, Brazil
+55 11 4593 9200

Asia
Shanghai, China
2F, Block C
200 Jinsu Road
Pudong, 201206
Shanghai, China
+86 (0) 21 6028 4888

Europe
Pommerloch, Luxembourg
19 Route de Bastogne
Pommerloch, Luxembourg , L-9638
+352 269 050 35

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