Bergaflex™ BFI U 40D-3E639 Black

Thermoplastic Elastomer

Key Characteristics

Product Description		
Bergaflex™ BFI U 40D-3E639 Black is an easy processing, flame retardant, general purpose TPE.		
General		
Material Status	• Commercial: Active	
Regional Availability	• Europe	
Features	• Flame Retardant • General Purpose	• Good Flow • Halogenated
Uses	• Appliances • Automotive Applications	• General Purpose • Industrial Applications
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	1.22	1.22	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/5.0 kg)	20 to 80 cm³/10min	20 to 80 cm³/10min	ISO 1133
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [2, 3]			DIN 53504
Across Flow : Break, 73°F (23°C)	1600 psi	11.0 MPa	
Flow : Break, 73°F (23°C)	1450 psi	10.0 MPa	
Tensile Elongation [2, 3]			DIN 53504
Across Flow : Break, 73°F (23°C)	580 %	580 %	
Flow : Break, 73°F (23°C)	550 %	550 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore D, 10 sec)	40	40	ISO 48-4
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.08 in (2.0 mm))	V-2	V-2	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	338 to 392 °F	170 to 200 °C
Middle Temperature	356 to 410 °F	180 to 210 °C
Front Temperature	365 to 428 °F	185 to 220 °C
Nozzle Temperature	374 to 428 °F	190 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).

Bergaflex™ BFI U 40D-3E639 Black 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

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] 7.9 in/min (200 mm/min)

[3] Specimen type S2

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