



Bergaflex™ BFI 55A-351

Thermoplastic Elastomer

Key Characteristics

Product Description

Bergaflex BFI 55A-351 is an easy processing, general purpose TPE.
The material is filled and has therefore a high density.

General

| | | | |
|-----------------------|--|-----------------------------|-----------------------------|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East • Asia Pacific | • Europe • North America | |
| Features | • General Purpose | • Good Processability | • Good Processing Stability |
| Uses | • Consumer Applications | • General Purpose | |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Black | • Natural Color | |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|--|--|-------------|
| Density (73°F (23°C), Black) | 1.18 g/cm ³ | 1.18 g/cm ³ | 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) | 943 psi | 6.50 MPa | |
| Tensile Elongation ² | | | DIN 53504 |
| Break, 73°F (23°C), 0.0787 in (2.00 mm) | 750 % | 750 % | |
| Compression Set | | | ISO 815 |
| 73°F (23°C), 72 hr | 18 % | 18 % | |
| 158°F (70°C), 22 hr | 41 % | 41 % | |
| 212°F (100°C), 22 hr | 79 % | 79 % | |
| Hardness | Typical Value (English) | Typical Value (SI) | Test Method |
| Shore Hardness ³ (Shore A) | 55 | 55 | ISO 7619 |
| 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 |

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 55A-351 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 55A-351 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)

³ ±5 Sh A



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