

# Bergaflex™ BFI 55A-3101 Thermoplastic Elastomer

## **Key Characteristics**

Product Description			
Bergaflex BFI 55A-3101 is a	general purpose TPE. The material	is semi filled and has therefor	re a medium density.
General			
Material Status	<ul> <li>Commercial: Active</li> </ul>		
Regional Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>North America</li></ul>	
Features	General Purpose	<ul> <li>Good Processability</li> </ul>	<ul> <li>Good Processing Stability</li> </ul>
Uses	<ul> <li>Consumer Applications</li> </ul>	<ul> <li>General Purpose</li> </ul>	
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>		
Appearance	• Black	<ul> <li>Natural Color</li> </ul>	
Forms	<ul> <li>Pellets</li> </ul>		
Processing Method	<ul> <li>Injection Molding</li> </ul>		

# Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density (73°F (23°C), Black)	0.990 g/cm <sup>3</sup>	0.990 g/cm <sup>3</sup>	ISO 1183
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress <sup>2</sup>			DIN 53504
Break, 73°F (23°C), 0.0787 in (2.00 mm)	943 psi	6.50 MPa	
Tensile Elongation <sup>2</sup>			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	13 %	13 %	
158°F (70°C), 22 hr	53 %	53 %	
lardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness <sup>3</sup> (Shore A)	50	50	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 mol	ded 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			

Rev: 2018-10-04 Page: 1 of 2

#### 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<sup>TM</sup> BFI 55A-3101 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-3101 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**

- <sup>1</sup> Typical values are not to be construed as specifications.
- <sup>2</sup> 7.9 in/min (200 mm/min)
- <sup>3</sup> ±5 Sh A

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Rev: 2018-10-04 Page: 2 of 2