GLS AB0-059

Thermoplastic Elastomer

Key Characteristics

Product Description		
GLS AB0-059 has superior performance at elevated tempertures.		
General		
Material Status	• Commercial: Active	
Regional Availability	• Europe	
Features	• General Purpose	
Uses	• Automotive Applications	• Fasteners
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	1.22 g/cm³	1.22 g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/5.0 kg)	3.0 to 10 cm³/10min	3.0 to 10 cm³/10min	ISO 1133
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2] (100% Strain, 73°F (23°C))	406 psi	2.80 MPa	DIN 53504-S2
Tensile Stress [2] (300% Strain, 73°F (23°C))	769 psi	5.30 MPa	DIN 53504-S2
Tensile Strength [2] (Break, 73°F (23°C))	870 psi	6.00 MPa	DIN 53504-S2
Tensile Elongation [2] (Break, 73°F (23°C))	450 %	450 %	DIN 53504-S2
Compression Set			ISO 815
73°F (23°C), 72 hr	22 %	22 %	
158°F (70°C), 22 hr	36 %	36 %	
212°F (100°C), 22 hr	43 %	43 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	60 to 70	60 to 70	ISO 48-4
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			Internal Method
392°F (200°C), 11200 sec^-1	16.0 Pa·s	16.0 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	338 to 374 °F	170 to 190 °C
Middle Temperature	356 to 392 °F	180 to 200 °C
Front Temperature	374 to 410 °F	190 to 210 °C
Nozzle Temperature	370 to 410 °F	188 to 210 °C
Processing (Melt) Temp	374 to 410 °F	190 to 210 °C
Mold Temperature	86 to 122 °F	30 to 50 °C
Screw Speed	80 to 120 rpm	80 to 120 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 GLS AB0-059 with minimal property loss, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should remain as low as possible. The final determination of regrind effectiveness should be determined by the customer.

GLS AB0-059 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 range: fast
1st Stage boost pressure: 25 to 60 bar
2nd Stage hold pressure: 20-40% of boost
Hold time (thick) range: 3-10 sec
Hold time (thin) range: 1-3 sec

Notes

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

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

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