GLS AD3-569

Thermoplastic Elastomer

Key Characteristics

Product Description			
GLS AD3-569 is a TPU based black material bondable to Nylon.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Features	• Good Processability		
Uses	• Consumer Applications	• Overmolding	• Soft Touch 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	1.04	1.04	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [2, 3] (Break, 73°F (23°C))	1380 psi	9.50 MPa	ISO 37
Tensile Elongation [2, 3] (Break, 73°F (23°C))	640 %	640 %	ISO 37
Tear Strength (73°F (23°C))	186 lbf/in	32.6 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 24 hr	25 %	25 %	
158°F (70°C), 24 hr	72 %	72 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	50	50	ISO 48-4
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			Internal Method
392°F (200°C), 11200 sec^-1	17.4 Pa·s	17.4 Pa·s	
Cured Properties	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Peel Strength (73°F (23°C))	15.0 lbf/in	2.63 N/mm	Internal Method

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	140 to 176 °F	60 to 80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.020 to 0.030 %	0.020 to 0.030 %
Rear Temperature	356 to 374 °F	180 to 190 °C
Middle Temperature	392 to 428 °F	200 to 220 °C
Front Temperature	410 to 464 °F	210 to 240 °C
Nozzle Temperature	410 to 464 °F	210 to 240 °C
Processing (Melt) Temp	410 to 464 °F	210 to 240 °C
Mold Temperature	55 to 130 °F	13 to 54 °C
Back Pressure	0.00 to 50.0 psi	0.00 to 0.345 MPa

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Injection	Typical Value (English)	Typical Value (SI)
Screw Speed	50 to 80 rpm	50 to 80 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).

GLS AD3-569 Black should not be left in the barrel for extended idle periods (greater than 5 minutes).

Suggested Dewpoint: -40°F

Hot Runners: 380°F-480°F
Hot Tip: 380°F-480°F

Injection Speed: 0.5 to 2 in/sec
1st Stage - Boost Pressure: 500 to 1,000 psi
2nd Stage - Hold Pressure: 20-60% of Boost
Hold Time (Thick Part): 2 to 4 sec
Hold Time (Thin Part): 1 to 2 sec

Notes

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

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

[3] 2 hr

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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