GLS 446-141D Graphite

Thermoplastic Elastomer

Key Characteristics

Product Description			
GLS 446-141D Graphite is a custom TPE compound			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Colorability	• Good Processability	• Low Friction
Uses	• Consumer Applications	• Electrical/Electronic Applications	• Overmolding
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 [2]	1.12 g/cm³	1.12 g/cm³	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (300% Strain)	919 psi	6.34 MPa	ASTM D412
Tensile Strength [2] (Break)	1310 psi	9.01 MPa	ASTM D412
Tensile Elongation [2] (Break)	760 %	760 %	ASTM D412
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness			ASTM D2240
Shore A, 10 sec, 73°F (23°C), 0.236 in (6.00 mm), Injection Molded	78	78	
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	24.6 Pa·s	24.6 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.020 to 0.030 %	0.020 to 0.030 %
Suggested Max Regrind	20 %	20 %
Rear Temperature	320 to 370 °F	160 to 188 °C
Middle Temperature	350 to 380 °F	177 to 193 °C
Front Temperature	370 to 446 °F	188 to 230 °C
Nozzle Temperature	370 to 464 °F	188 to 240 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Fast	Fast
Back Pressure	0.00 to 120 psi	0.00 to 0.827 MPa
Screw Speed	40 to 100 rpm	40 to 100 rpm

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Notes

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

[2] China

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