

RESILIENCE® PP6435 B1

GEON Performance Solutions - Polypropylene

Monday, June 17, 2024

General Information

Product Description

The GEON® family of polypropylene- and polyethylene-based products covers a wide range of applications, markets and performance requirements. Standard grades are compounded with calcium carbonate, glass and talc to provide a desired balance of properties including stiffness, durability, impact resistance and heat resistance. Custom grades are available with features such as UV stabilizers, heat stabilizers, custom color, high impact, etc.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Impact Modifier		
Features	• Impact Modified		
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Colors Available		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.17 g/cm ³	1.17 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	9.0 g/10 min	9.0 g/10 min	ISO 1133
Molding Shrinkage (0.126 in (3.20 mm))	0.20 to 0.50 %	0.20 to 0.50 %	Internal Method
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Yield)	13300 psi	92.0 MPa	ISO 527-2
Tensile Strain (Break)	6.0 %	6.0 %	ISO 527-2
Flexural Modulus	812000 psi	5600 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact Strength (73°F (23°C))	6.7 ft·lb/in ²	14 kJ/m ²	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	300 °F	149 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	288 °F	142 °C	ISO 75-2/A
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate (0.126 in (3.20 mm))	< 3.9 in/min	< 100 mm/min	ISO 3795

Notes

¹ Typical properties: these are not to be construed as specifications.