

RESILIENCE® PP5440 B1

GEON Performance Solutions - Polypropylene Homopolymer

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	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber		
Features	• General Purpose		
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.25 g/cm ³	1.25 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)	4.0 g/10 min	4.0 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress	13100 psi	90.0 MPa	ISO 527-2
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527-2
Flexural Modulus	972000 psi	6700 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	4.2 ft·lb/in ²	8.9 kJ/m ²	ISO 179
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	315 °F	157 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	300 °F	149 °C	ISO 75-2/A

Notes

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