RESILIENCE® PP5420 A1

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	• Africa & Middle East	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• General Purpose		
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Automotive Specifications	• GM GMP.PP.099		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.05	g/cm³	1.05	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)	10	g/10 min	10	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Stress	10000	psi	69.0	MPa	ISO 527-2
Flexural Modulus	537000	psi	3700	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact Strength	4.3	ft·lb/in²	9.0	kJ/m²	ISO 180
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					
66 psi (0.45 MPa), Unannealed	306	°F	152	°C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	286	°F	141	°C	ISO 75-2/A

Notes

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