



Geon™ Vinyl Fittings M1021 (Provisional)

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active ¹		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Medium Flow		
Uses	• Fittings		
Agency Ratings	• NSF STD-14 ²	• NSF STD-61 ²	• NSF Type I ²
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ³

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.42	1.42	ASTM D792
Spiral Flow	27.0 in	68.6 cm	
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
PVC Cell Classification	12454	12454	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ⁴	430000 psi	2960 MPa	ASTM D638
Tensile Strength ⁴ (Yield)	7550 psi	52.1 MPa	ASTM D638
Flexural Modulus			ASTM D790
73°F (23°C), 0.125 in (3.18 mm)	430000 psi	2960 MPa	
Flexural Strength			ASTM D790
73°F (23°C), 0.125 in (3.18 mm)	12400 psi	85.5 MPa	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	0.90 ft·lb/in	48 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	81	81	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	159 °F	70.6 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	390 to 410 °F	199 to 210 °C

Notes

¹ RoHS compliant.

² NSF Agency rating are based on tested and certified colors. Please contact PolyOne technical for further information.

³ Typical values are not to be construed as specifications.

⁴ Type I, 0.20 in/min (5.1 mm/min)