



Geon™ Vinyl Fittings M1200

Rigid Polyvinyl Chloride

Key Characteristics

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

Technical Properties ³

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.36	1.36	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
PVC Cell Classification	15334	15334	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ⁴	380000 psi	2620 MPa	ASTM D638
Tensile Strength ⁴ (Yield)	6800 psi	46.9 MPa	ASTM D638
Tensile Elongation ⁵ (Break)	20 %	20 %	ASTM D638
Flexural Modulus	350000 psi	2410 MPa	ASTM D790
Flexural Strength	10500 psi	72.4 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	3.0 ft-lb/in	160 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	20 ft-lb/in	1100 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	82	82	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	165 °F	73.9 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	158 °F	70.0 °C	

Processing Information

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

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Notes

¹ RoHS compliant

² NSF Agency ratings 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, 2.0 in/min (51 mm/min)

⁵ Type I, 0.20 in/min (5.1 mm/min)

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