



Geon™ Vinyl Fittings 87431

Rigid Polyvinyl Chloride

Key Characteristics

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

Technical Properties ³

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.38	1.38	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
PVC Cell Classification	12464	12464	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ⁴	445000 psi	3070 MPa	ASTM D638
Tensile Strength ⁴ (Yield)	7700 psi	53.1 MPa	ASTM D638
Flexural Modulus	480000 psi	3310 MPa	ASTM D790
Flexural Strength	13600 psi	93.8 MPa	ASTM D790
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	1.0 ft-lb/in	53 J/m	
73°F (23°C), 0.250 in (6.35 mm), Injection Molded	0.90 ft-lb/in	48 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	88	88	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	162 °F	72.2 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	395 to 400 °F	202 to 204 °C

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)

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