



Geon™ Vinyl Rigid Molding M4910 (USP CLASS VI for TRANS 9494 only)

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Medium Flow	• Radiation (Gamma) Resistant	
Agency Ratings	• USP Class VI		
Appearance	• Clear/Transparent		
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.30	1.30	ASTM D792
Spiral Flow	29.0 in	73.7 cm	
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	422000 psi	2910 MPa	ASTM D638
Tensile Strength ² (Yield)	7900 psi	54.5 MPa	ASTM D638
Tensile Elongation ² (Break)	19 %	19 %	ASTM D638
Flexural Modulus	410000 psi	2830 MPa	ASTM D790
Flexural Strength	12400 psi	85.5 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	1.0 ft·lb/in	53 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.5 ft·lb/in	80 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	83	83	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)	154 °F	67.8 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	149 °F	65.0 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	142 °F	61.1 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	144 °F	62.2 °C	

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	390 to 400 °F	199 to 204 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 2.0 in/min (51 mm/min)

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