



Geon™ Vinyl Rigid Molding M3000

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		
Uses	• Fittings		
Agency Ratings	• NSF 14	• NSF 61	• NSF Type I
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
Spiral Flow	25.0 in	63.5 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 ²	450000 psi	3100 MPa	ASTM D638
Tensile Strength ² (Yield)	7400 psi	51.0 MPa	ASTM D638
Flexural Modulus	450000 psi	3100 MPa	ASTM D790
Flexural Strength	13300 psi	91.7 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	0.70 ft·lb/in	37 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)	163 °F	72.8 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	162 °F	72.2 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.0630 in (1.60 mm), ALL)	V-0	V-0	UL 94

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 Typical values are not to be construed as specifications.

² Type I, 2.0 in/min (51 mm/min)

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