



Geon™ Vinyl Rigid Molding M5100

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	• Fluid Handling	• Outdoor Applications	
Agency Ratings	• NSF 61	• NSF Unspecified Rating	
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
Spiral Flow	22.0 in	55.9 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	430000 psi	2960 MPa	ASTM D638
Tensile Strength ² (Yield)	7300 psi	50.3 MPa	ASTM D638
Tensile Elongation ² (Break)	25 %	25 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength	11900 psi	82.0 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	0.50 ft·lb/in	27 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	2.0 ft·lb/in	110 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), Unannealed, 0.250 in (6.35 mm)	153 °F	67.2 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	162 °F	72.2 °C	

Processing Information

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

Notes

¹ Typical values are not to be construed as specifications.

² 2.0 in/min (51 mm/min)

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