



Geon™ Vinyl Rigid Molding M5200

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• High Impact Resistance	• Medium Flow
Uses	• Construction Applications	• General Purpose	• Outdoor Applications
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
Spiral Flow	24.0 in	61.0 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	360000 psi	2480 MPa	ASTM D638
Tensile Strength ² (Yield)	6500 psi	44.8 MPa	ASTM D638
Tensile Elongation ² (Break)	50 %	50 %	ASTM D638
Flexural Modulus	370000 psi	2550 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
0°F (-18°C), 0.125 in (3.18 mm), Injection Molded	3.0 ft·lb/in	160 J/m	
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	12 ft·lb/in	640 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, 15 sec)	80	80	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)	169 °F	76.1 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	172 °F	77.8 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	162 °F	72.2 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	172 °F	77.8 °C	

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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 Type I, 2.0 in/min (51 mm/min)

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