



Geon™ Vinyl Rigid Molding M5200

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South 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
Molding Shrinkage - Flow	0.0020 to 0.0050 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	3.00 ft-lb/in	160 J/m	
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	12.0 ft-lb/in	641 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	20.0 ft-lb/in	1070 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	
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	172 °F	77.8 °C	ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	162 °F	72.2 °C	ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	172 °F	77.8 °C	ASTM D648
Additional Information	Typical Value (English)	Typical Value (SI)	
Relative Spiral Flow	24.0 in	610 mm	

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)

CONTACT INFORMATION

Americas

Argentina - Buenos Aires
+0054 11 4200 5917

Brasil - Piracicaba - SP
+55 19 3206 0561

Canada - St Remi de Napierville
+1 450 454 8010

Colombia - Bogota D.C.
+57 1 622 1844

Mexico - Toluca
+52 722 2790200

United States - Avon Lake
+1 440 930 1000

Asia

China - HouJie Town, DongGuan
City,
+ 86 (0) 769 8587 8800

Europe

Belgium - Assesse
+32 (0) 83 660 211



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Better Business Solutions.™

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 (0) 21 5080 1188

PolyOne Europe

2 Rue Melville Wilson
5330 Assesse, Belgium
+32 (0) 83 660 211

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