



# Geon™ Vinyl Rigid Molding M5240

## 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 <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.41	1.41 g/cm <sup>3</sup>	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 <sup>2</sup>	340000 psi	2340 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	6200 psi	42.7 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	45 %	45 %	ASTM D638
Flexural Modulus	350000 psi	2410 MPa	ASTM D790
Flexural Strength	10300 psi	71.0 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	7.00 ft-lb/in	374 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	14.0 ft-lb/in	747 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	79	79	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	
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)	160 °F	71.1 °C	ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	169 °F	76.1 °C	ASTM D648
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating - UL (0.0630 in (1.60 mm), ALL)	• V-0 • 5VA	• V-0 • 5VA	UL 94

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UL 746	Typical Value (English)	Typical Value (SI)	Test Method
RTI Str	194 °F	90.0 °C	UL 746
RTI Imp	185 °F	85.0 °C	UL 746
RTI Elec	194 °F	90.0 °C	UL 746
Outdoor Suitability (All Colors)	f1	f1	UL 746C
Additional Information	Typical Value (English)	Typical Value (SI)	
Relative Spiral Flow	24 in	610 mm	

**Processing Information**

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

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 2.0 in/min (51 mm/min)

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