



Geon™ Vinyl Rigid Molding M3500

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	• Appliances • Business Equipment	• Construction Applications • Electrical/Electronic Applications	• General Purpose • Telecommunications
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.36	1.36	ASTM D792
Spiral Flow	28.0 in	71.1 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	370000 psi	2550 MPa	ASTM D638
Tensile Strength ² (Yield)	6700 psi	46.2 MPa	ASTM D638
Tensile Elongation ² (Break)	50 %	50 %	ASTM D638
Flexural Modulus	360000 psi	2480 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
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	1.0 ft·lb/in	53 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	12 ft·lb/in	640 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	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)	163 °F	72.8 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	171 °F	77.2 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	160 °F	71.1 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	167 °F	75.0 °C	
RTI Elec	185 °F	85.0 °C	UL 746
RTI Imp	185 °F	85.0 °C	UL 746

Thermal	Typical Value (English)	Typical Value (SI)	Test Method
RTI Str	185 °F	85.0 °C	UL 746
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	• V-0 • 5VA	• V-0 • 5VA	UL 94

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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