

Geon™ Vinyl Rigid Molding M4300

Rigid Polyvinyl Chloride

Key Characteristics

General

Material Status	• Commercial: Active		
Regional Availability	Africa & Middle East	Europe	North America
	Asia Pacific	Latin America	
Features	General Purpose	High Impact Resistance	Medium Flow
Uses	Fluid Handling	General Purpose	
Agency Ratings	NSF STD-61	NSF Unspecified Rating	
Appearance	Clear/Transparent		
Forms	Pellets		

Technical Properties¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.32	1.32	ASTM D792
Spiral Flow	23.0 in	58.4 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	410000 psi	2830 MPa	ASTM D638
Tensile Strength ² (Yield)	7900 psi	54.5 MPa	ASTM D638
Tensile Elongation ² (Break)	30 %	30 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength	11500 psi	79.3 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	16 ft·lb/in	850 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
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	158 °F	70.0 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	169 °F	76.1 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	154 °F	67.8 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	163 °F	72.8 °C	

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm), ALL	V-0	V-0	
0.08 in (1.9 mm), ALL	5VA	5VA	
Optical	Typical Value (English)	Typical Value (SI)	Test Method
Transmittance ³ (125 mil (3180 µm))	78.0 %	78.0 %	ASTM D1003
Haze (125 mil (3180 µm))	4.00 %	4.00 %	ASTM D1003

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	390 to 400 °F	199 to 204 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 2.0 in/min (51 mm/min)

³ CIE Illuminant C

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