Geon™ Vinyl Rigid Molding M5100

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Medium Flow		
Uses	• Fluid Handling	• Outdoor Applications	
Agency Ratings	• NSF 61	• NSF Unspecified Rating	
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
Spiral Flow	22.0 in	55.9 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]	430000 psi	2960 MPa	ASTM D638
Tensile Strength [2] (Yield)	7300 psi	50.3 MPa	ASTM D638
Tensile Elongation [2] (Break)	25 %	25 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength	11900 psi	82.0 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	0.50 ft·lb/in	27 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	2.0 ft·lb/in	110 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
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	153 °F	67.2 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	162 °F	72.2 °C	

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] 2.0 in/min (51 mm/min)

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