Geon™ Vinyl Rigid Molding M3220

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Impact Resistance		
Uses	• Fittings		
Agency Ratings	• NSF 14	• NSF 61	
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.37	1.37	ASTM D792
Spiral Flow	18.0 in	45.7 cm	
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
PVC Cell Classification	15453	15453	ASTM D1784
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	420000 psi	2900 MPa	ASTM D638
Tensile Strength [2] (Yield)	7400 psi	51.0 MPa	ASTM D638
Tensile Elongation [2] (Break)	25 %	25 %	ASTM D638
Flexural Modulus	410000 psi	2830 MPa	ASTM D790
Flexural Strength	11800 psi	81.4 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	2.0 ft·lb/in	110 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	14 ft·lb/in	750 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
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	151 °F	66.1 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	395 to 400 °F	202 to 204 °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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