

# GEON® Rigid M1210

## GEON Performance Solutions - Rigid Polyvinyl Chloride

Thursday, November 2, 2023

### General Information

General			
Material Status	• Commercial: Active <sup>1</sup>		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Impact Modifier		
Features	• Impact Modified		
Uses	• Fittings		
Agency Ratings	• NSF STD-14	• NSF STD-61	• NSF Type II <sup>2</sup>
Forms	• Pellets		
Processing Method	• Injection Molding		

### ASTM & ISO Properties <sup>3</sup>

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.38	1.38	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus <sup>4</sup>	360000 psi	2480 MPa	ASTM D638
Tensile Strength <sup>4</sup> (Yield)	6200 psi	42.7 MPa	ASTM D638
Flexural Modulus	403000 psi	2780 MPa	ASTM D790
Flexural Strength	10800 psi	74.5 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal 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	20 ft·lb/in	1100 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	107	107	ASTM D785
Durometer Hardness (Shore D)	81	81	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	160 °F	71.1 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm), WT)	V-0	V-0	UL 94

### Additional Information

NSF - Cell Classification D1784 (NSF Listed) -- 14333 / NSF - Cell Classification D1784 (Capable) -- 14334

### Processing Information

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

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### Notes

<sup>1</sup> RoHS compliant.

<sup>2</sup> NSF Agency ratings are based on tested and certified colors. Please contact PolyOne technical for further information.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> Type I, 2.0 in/min (51 mm/min)

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