



# Geon™ Vinyl Rigid Extrusion 84110

## Rigid Polyvinyl Chloride

### Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Food Contact Acceptable		
Uses	• Film	• Profiles	• Sheet
Agency Ratings	• FDA Food Contact, Unspecified Rating	• NSF 51	• NSF 61
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion		

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.33	1.33	ASTM D792
PVC Cell Classification	14453	14453	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	402000 psi	2770 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	7420 psi	51.2 MPa	ASTM D638
Flexural Modulus	410000 psi	2830 MPa	ASTM D790
Flexural Strength	12500 psi	86.2 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	6.0 ft·lb/in	320 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	0.60 ft·lb/in	32 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	11 ft·lb/in	570 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) <sup>3</sup>	1.37 in·lb/mil	60.9 J/cm	
73°F (23°C) <sup>4</sup>	1.94 in·lb/mil	86.3 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	82	82	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	156 °F	68.9 °C	
CLTE - Flow	3.8E-5 in/in/°F	6.8E-5 cm/cm/°C	ASTM D696
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.0591 in (1.50 mm), ALL)	V-0	V-0	UL 94

#### Additional Information

Note: NSF listings are obtained on specific colors. Contact PolyOne for the latest listing of approved colors for this product.

Note: The Cell Classification was determined using the notched Izod test with injection molded samples.

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Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	360 to 380 °F	182 to 193 °C

Notes

- <sup>1</sup> Typical values are not to be construed as specifications.
- <sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)
- <sup>3</sup> Procedure A, C.125 Dart
- <sup>4</sup> Procedure B, C.125 Dart

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