



# Geon™ Vinyl Rigid Extrusion 87160

## Rigid Polyvinyl Chloride

### Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Features	• General Purpose • High Impact Resistance
Uses	• General Purpose • Profiles
Agency Ratings	• NSF 51
Forms	• Pellets
Processing Method	• Extrusion

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
PVC Cell Classification	13354	13354	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	420000 psi	2890 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	6340 psi	43.7 MPa	ASTM D638
Flexural Modulus	419000 psi	2890 MPa	ASTM D790
Flexural Strength	11900 psi	82.3 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	2.4 ft·lb/in	130 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	2.0 ft·lb/in	110 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) <sup>3</sup>	1.48 in·lb/mil	65.8 J/cm	
73°F (23°C) <sup>4</sup>	3.62 in·lb/mil	161 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	83	83	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)	160 °F	71.1 °C	
CLTE - Flow	3.6E-5 in/in/°F	6.4E-5 cm/cm/°C	ASTM D696
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.0295 in (0.749 mm), ALL	V-0	V-0	
0.0591 in (1.50 mm), ALL	5VA	5VA	
Additional Information	Typical Value (English)	Typical Value (SI)	
Ease of Sizing	Good	Good	

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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