



# Geon™ Vinyl Rigid Extrusion L7801

## 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	• Outdoor Applications	• Profiles	
Forms	• Pellets		
Processing Method	• Extrusion		

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.51	1.51	ASTM D792
PVC Cell Classification	1-41424-33-0000	1-41424-33-0000	ASTM D4216
PVC Cell Classification	16254	16254	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	421000 psi	2900 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	5990 psi	41.3 MPa	ASTM D638
Flexural Modulus	430000 psi	2960 MPa	ASTM D790
Flexural Strength	12300 psi	84.8 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), Compression Molded	3.7 ft·lb/in	200 J/m	
73°F (23°C), 0.125 in (3.18 mm), Compression Molded	21 ft·lb/in	1100 J/m	
Drop Impact Resistance			ASTM D4226
32°F (0°C) <sup>3</sup>	0.910 in·lb/mil	40.5 J/cm	
32°F (0°C) <sup>4</sup>	0.910 in·lb/mil	40.5 J/cm	
73°F (23°C) <sup>3</sup>	1.17 in·lb/mil	52.0 J/cm	
73°F (23°C) <sup>4</sup>	4.00 in·lb/mil	178 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	79	79	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	169 °F	76.1 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	174 °F	78.9 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	160 °F	71.1 °C	

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Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	165 °F	73.9 °C	ASTM D648
CLTE - Flow	3.5E-5 in/in/°F	6.3E-5 cm/cm/°C	ASTM D696
Additional Information	Typical Value (English)	Typical Value (SI)	
Ease of Sizing	Acceptable	Acceptable	
Note: The Cell Classification was determined using the notched Izod test with injection molded samples.			

**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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