



Geon™ Vinyl Rigid Extrusion L6180

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Weather Resistant		
Uses	• Building Materials • Outdoor Applications	• Profiles • Windows & Doors	
Appearance	• Brown		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.29	1.29	ASTM D792
PVC Cell Classification	1-02453-43	1-02453-43	ASTM D4216
PVC Cell Classification	11444	11444	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	389000 psi	2680 MPa	ASTM D638
Tensile Strength ² (Yield)	7640 psi	52.7 MPa	ASTM D638
Flexural Modulus	398000 psi	2740 MPa	ASTM D790
Flexural Strength	13400 psi	92.5 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	0.30 ft·lb/in	16 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	0.40 ft·lb/in	21 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	0.30 ft·lb/in	16 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	1.97 in·lb/mil	87.6 J/cm	
73°F (23°C) ⁴	3.34 in·lb/mil	149 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	85	85	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)	168 °F	75.6 °C	
CLTE - Flow	4.0E-5 in/in/°F	7.2E-5 cm/cm/°C	ASTM D696

Additional Information

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

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

³ Procedure A, C.125 Dart

⁴ Procedure B, C.125 Dart



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