



Geon™ Vinyl Rigid Extrusion 87850

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose		
Uses	• General Purpose	• Outdoor Applications	
Forms	• Pellets		
Processing Method	• Sheet Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.44	1.44	ASTM D792
PVC Cell Classification	1-41332-23	1-41332-23	ASTM D4216
PVC Cell Classification	15343	15343	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	360000 psi	2480 MPa	ASTM D638
Tensile Strength ² (Yield)	6290 psi	43.4 MPa	ASTM D638
Flexural Modulus	355000 psi	2450 MPa	ASTM D790
Flexural Strength	10200 psi	70.3 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	12 ft·lb/in	630 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	16 ft·lb/in	880 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	14 ft·lb/in	720 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	1.47 in·lb/mil	65.4 J/cm	
73°F (23°C) ⁴	2.93 in·lb/mil	130 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)	154 °F	67.8 °C	
CLTE - Flow	4.1E-5 in/in/°F	7.3E-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	370 to 400 °F	188 to 204 °C

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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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