



Geon™ Vinyl Rigid Extrusion 87549

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Profiles		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Profile Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.34	1.34	ASTM D792
PVC Cell Classification	16354	16354	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	360000 psi	2480 MPa	ASTM D638
Tensile Strength ² (Yield)	6000 psi	41.4 MPa	ASTM D638
Flexural Modulus	420000 psi	2900 MPa	ASTM D790
Flexural Strength	13300 psi	91.9 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	20 ft·lb/in	1100 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	9.7 ft·lb/in	520 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	1.7 ft·lb/in	91 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	1.45 in·lb/mil	64.5 J/cm	
73°F (23°C) ⁴	3.83 in·lb/mil	170 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)	160 °F	71.1 °C	
CLTE - Flow	3.9E-5 in/in/°F	7.0E-5 cm/cm/°C	ASTM D696
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	V-0	V-0	UL 94

Additional Information

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

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	360 to 380 °F	182 to 193 °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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