

Geon™ Vinyl Rigid Extrusion L1101 Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	Commercial: Active		
Regional Availability	 Africa & Middle East Asia Pacific Europe Latin America North America 		
Features	Good Dimensional Stability Good Melt Strength		
Uses	Profiles		
Appearance	Colors Available		
Forms	• Pellets		
Processing Method	Extrusion		

Technical Properties 1

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.35	1.35	ASTM D792
PVC Cell Classification	16343	16343	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	376000 psi	2590 MPa	ASTM D638
Tensile Strength ² (Yield)	6390 psi	44.1 MPa	ASTM D638
Flexural Modulus	380000 psi	2620 MPa	ASTM D790
Flexural Strength	11300 psi	78.2 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	25 ft·lb/in	1300 J/m	
Across Flow: 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	24 ft·lb/in	1300 J/m	
Flow: 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	23 ft·lb/in	1200 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	1.21 in·lb/mil	53.8 J/cm	
73°F (23°C) ⁴	3.50 in·lb/mil	156 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)	156 °F	68.9 °C	
CLTE - Flow	3.7E-5 in/in/°F	6.7E-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	Typical Value (English)	Typical Value (SI)	
Fase of Sizing	Excellent	Excellent	

Ease of Sizing Excellent Excellent

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

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Processing Information

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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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