



Geon™ Vinyl Rigid Extrusion L0676

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	• Low Temperature Impact Resistance	
Uses	• Profiles		
Agency Ratings	• NSF 51		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.29	1.29	ASTM D792
PVC Cell Classification	16224	16224	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	312000 psi	2150 MPa	ASTM D638
Tensile Strength ² (Yield)	5450 psi	37.6 MPa	ASTM D638
Flexural Modulus	318000 psi	2190 MPa	ASTM D790
Flexural Strength	9380 psi	64.6 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	26 ft·lb/in	1400 J/m	
Across Flow : -40°F (-40°C), 0.125 in (3.18 mm), Compression Molded	1.2 ft·lb/in	64 J/m	
Across Flow : 0°F (-18°C), 0.125 in (3.18 mm), Compression Molded	13 ft·lb/in	700 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	20 ft·lb/in	1100 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	1.81 in·lb/mil	80.5 J/cm	
73°F (23°C) ⁴	2.78 in·lb/mil	124 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	77	77	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)	161 °F	71.7 °C	
CLTE - Flow	4.5E-5 in/in/°F	8.1E-5 cm/cm/°C	ASTM D696
Additional Information	Typical Value (English)	Typical Value (SI)	
Ease of Sizing	Acceptable	Acceptable	

Note: NSF listings are obtained on specific colors. Contact PolyOne for the latest listing of approved colors for this product.

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

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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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