



Geon™ Vinyl Rigid Extrusion 85880

Rigid Polyvinyl Chloride

Key Characteristics

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

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
PVC Cell Classification	16344	16344	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	379000 psi	2620 MPa	ASTM D638
Tensile Strength ² (Yield)	6070 psi	41.9 MPa	ASTM D638
Flexural Modulus	363000 psi	2500 MPa	ASTM D790
Flexural Strength	10200 psi	70.4 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	23 ft·lb/in	1200 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	20 ft·lb/in	1100 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	15 ft·lb/in	820 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	1.12 in·lb/mil	49.8 J/cm	
73°F (23°C) ⁴	1.12 in·lb/mil	49.8 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	81	81	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)	158 °F	70.0 °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 (0.0394 in (1.00 mm), ALL)	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

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	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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