



Geon™ Vinyl Rigid Extrusion 87554E

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	• High Impact Resistance	
Uses	• General Purpose	• Profiles	
Appearance	• Frost		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.33	1.33	ASTM D792
PVC Cell Classification	13343	13343	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²			ASTM D638
77°F (25°C), 0.129 in (3.28 mm)	378000 psi	2600 MPa	
Tensile Strength ²			ASTM D638
Yield, 77°F (25°C), 0.129 in (3.28 mm)	6480 psi	44.7 MPa	
Flexural Modulus ³ (77°F (25°C))	394000 psi	2720 MPa	ASTM D790
Flexural Strength ³ (77°F (25°C))	11700 psi	80.7 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.131 in (3.33 mm), Compression Molded	3.4 ft·lb/in	180 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C), 0.132 in (3.35 mm) ⁴	> 2.00 in·lb/mil	> 89.0 J/cm	
73°F (23°C), 0.132 in (3.35 mm) ⁵	> 2.00 in·lb/mil	> 89.0 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
66 psi (0.45 MPa), Unannealed, 0.508 in (12.9 mm), Injection Molded	163 °F	72.6 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.512 in (13.0 mm)	164 °F	73.1 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.508 in (12.9 mm)	147 °F	63.7 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.512 in (13.0 mm), Injection Molded	156 °F	68.8 °C	
CLTE - Flow (-22 to 86°F (-30 to 30°C))	3.9E-5 in/in/°F	7.1E-5 cm/cm/°C	ASTM D696

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm), ALL	V-0	V-0	
0.08 in (2.0 mm), ALL	5VB	5VB	
0.09 in (2.3 mm), ALL	5VA	5VA	

Additional Information

Note: Data generated from testing of production material, lot # 5267654.

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 0.50 in/min (13 mm/min)

⁴ Procedure A, C.125 Dart

⁵ Procedure B, C.125 Dart



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