



Geon™ Vinyl Rigid Extrusion 8700A

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	• Good Dimensional Stability • Good Melt Strength	
Uses	• Automotive Applications • Beltline Moldings	• General Purpose • Profiles	
Agency Ratings	• NSF STD-51	• NSF STD-61	
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.38	1.38	ASTM D792
PVC Cell Classification	16344	16344	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	390000 psi	2690 MPa	ASTM D638
Tensile Strength ² (Yield)	6200 psi	42.7 MPa	ASTM D638
Flexural Modulus	380000 psi	2620 MPa	ASTM D790
Flexural Strength	11000 psi	75.8 MPa	ASTM D790
Compressive Strength	8100 psi	55.8 MPa	ASTM D695
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
0°F (-18°C), 0.125 in (3.18 mm), Compression Molded	1.1 ft·lb/in	59 J/m	
32°F (0°C), 0.125 in (3.18 mm), Compression Molded	1.6 ft·lb/in	85 J/m	
73°F (23°C), 0.125 in (3.18 mm), Compression Molded	17 ft·lb/in	910 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	0.800 in·lb/mil	35.6 J/cm	
73°F (23°C) ⁴	0.800 in·lb/mil	35.6 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	111	111	ASTM D785
Durometer Hardness (Shore D, 15 sec)	78	78	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)	163 °F	72.8 °C	
CLTE - Flow	3.7E-5 in/in/°F	6.7E-5 cm/cm/°C	ASTM D696
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Dielectric Strength	690 V/mil	27 kV/mm	ASTM D149
Dielectric Constant			ASTM D150
60 Hz	3.90	3.90	
1 kHz	3.30	3.30	

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Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Dissipation Factor ⁵			ASTM D150
86°F (30°C), 60 Hz	0.029	0.029	
86°F (30°C), 1 kHz	0.040	0.040	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.028 in (0.71 mm), ALL	V-0	V-0	
0.06 in (1.5 mm), ALL	5VA	5VA	
CSA Flammability ⁶ (34.3 mil (870.0 µm))	V-0	V-0	
Additional Information	Typical Value (English)	Typical Value (SI)	
Ease of Sizing	Excellent	Excellent	
Note: Automotive OEM approval(s).			
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.			

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	355 to 360 °F	179 to 182 °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

⁵ 24 hr

⁶ All Colors

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