



Geon™ Vinyl Rigid Extrusion 8700X

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	• Automotive Applications	• Beltline Moldings	• Profiles
Agency Ratings	• NSF 51		
Automotive Specifications	• GM GM7001M (PVC)		
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	360000 psi	2480 MPa	ASTM D638
Tensile Strength ² (Yield)	6100 psi	42.1 MPa	ASTM D638
Flexural Modulus	360000 psi	2480 MPa	ASTM D790
Flexural Strength	11000 psi	75.8 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	21 ft·lb/in	1100 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	19 ft·lb/in	1000 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) ³	1.20 in·lb/mil	53.4 J/cm	
73°F (23°C) ⁴	1.20 in·lb/mil	53.4 J/cm	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	79	79	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)	164 °F	73.3 °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			UL 94
0.0295 in (0.749 mm), ALL	V-0	V-0	
0.0748 in (1.90 mm), ALL	5VA	5VA	

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Flammability	Typical Value (English)	Typical Value (SI)	Test Method
CSA Flammability ⁵			
36.2 mil (919.5 µm)	V-0	V-0	
62.2 mil (1.58 mm)	5VA	5VA	
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	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
- ⁵ All Colors

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