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 STD-51		
Automotive Specifications	• GM GM7001M (PVC)		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / 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
0.030 in (0.75 mm), ALL	V-0	V-0	
0.07 in (1.9 mm), ALL	5VA	5VA	

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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