Geon™ Vinyl Rigid Extrusion 87759

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Low Smoke Emission		
Uses	• Profiles		
Agency Ratings	• ASTM E 84		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.45	1.45	ASTM D792
PVC Cell Classification	13253	13253	ASTM D1784
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	420000 psi	2900 MPa	ASTM D638
Tensile Strength [2] (Yield)	5890 psi	40.6 MPa	ASTM D638
Flexural Modulus	393000 psi	2710 MPa	ASTM D790
Flexural Strength	10100 psi	69.6 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	3.5 ft·lb/in	190 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	3.7 ft·lb/in	200 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	4.3 ft·lb/in	230 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]	1.50 in·lb/mil	66.7 J/cm	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore D, 15 sec)	80	80	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)	154 °F	67.8 °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 (0.0591 in (1.50 mm), ALL)	V-0	V-0	UL 94
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Ease of Sizing	Good	Good	

Note: Finished part testing is required for ASTM E-84 certification.

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

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