Geon™ Vinyl Rigid Extrusion 87160

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	
Agency Ratings	• NSF 51		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
PVC Cell Classification	13354	13354	ASTM D1784
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	420000 psi	2890 MPa	ASTM D638
Tensile Strength [2] (Yield)	6340 psi	43.7 MPa	ASTM D638
Flexural Modulus	419000 psi	2890 MPa	ASTM D790
Flexural Strength	11900 psi	82.3 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256A
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	2.4 ft·lb/in	130 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	2.0 ft·lb/in	110 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) [3]	1.48 in·lb/mil	65.8 J/cm	
73°F (23°C) [4]	3.62 in·lb/mil	161 J/cm	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore D, 15 sec)	83	83	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)	160 °F	71.1 °C	
CLTE - Flow	3.6E-5 in/in/°F	6.4E-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	
0.0591 in (1.50 mm), ALL	5VA	5VA	
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Ease of Sizing	Good	Good	

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

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