Geon™ Vinyl Rigid Extrusion L6181

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	
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.42	1.42	ASTM D792
PVC Cell Classification	16364	16364	ASTM D1784
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	479000 psi	3300 MPa	ASTM D638
Tensile Strength [2] (Yield)	6490 psi	44.7 MPa	ASTM D638
Flexural Modulus	450000 psi	3100 MPa	ASTM D790
Flexural Strength	12100 psi	83.6 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	23 ft·lb/in	1200 J/m	
Across Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	3.5 ft·lb/in	190 J/m	
Flow : 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	3.7 ft·lb/in	200 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) [3]	1.46 in·lb/mil	64.9 J/cm	
73°F (23°C) [4]	3.57 in·lb/mil	159 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)	158 °F	70.0 °C	
CLTE - Flow	3.5E-5 in/in/°F	6.3E-5 cm/cm/°C	ASTM D696
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Ease of Sizing	Good	Good	

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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