Geon™ Bold L5000

Polyvinyl Chloride Alloy

Key Characteristics

Product Description			
PVC alloy for dark color capstock, profiles or sheet requiring good weathering in both horizontal (colors with L values greater than 60) and vertical applications. Comes in high gloss but may be customized for an application.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant	• High Gloss	• Weather Resistant
Uses	• Capstock • Construction Applications	• Decorative Railing • Profiles	• Sheet • Windows & Doors
Forms	• Cube		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.40	1.40	ASTM D792
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	328000 psi	2260 MPa	ASTM D638
Tensile Strength [2] (Yield)	6370 psi	43.9 MPa	ASTM D638
Flexural Modulus	361000 psi	2490 MPa	ASTM D790
Flexural Strength	11100 psi	76.6 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), Compression Molded	1.9 ft·lb/in	100 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) [3]	1.63 in·lb/mil	72.5 J/cm	
73°F (23°C) [4]	> 4.00 in·lb/mil	> 178 J/cm	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore D, 15 sec)	77	77	ASTM D2240
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load [5]			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	160 °F	71.0 °C	
Deflection Temperature Under Load [5]			ASTM D648
264 psi (1.8 MPa), Annealed	157 °F	69.3 °C	
CLTE - Flow	3.8E-5 in/in/°F	6.8E-5 cm/cm/°C	ASTM D696

Additional Information

Note: Physical properties based on Geon Bold L5000 LHB Brown 3481 Lot# 4699345 sample.

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	360 to 380 °F	182 to 193 °C

Extrusion Notes

Melt flow and downstream calibration similar to standard rigid PVC. Wider processing window allows sheet extrusion.

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] Conditioned at 50 deg.C

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