



Geon™ Bold L5500

Polyvinyl Chloride Alloy

Key Characteristics

Product Description	
PVC alloy for dark color capstock or profiles requiring excellent weathering in both horizontal and vertical applications. Comes in high gloss but may be customized for an application. Particularly suited for capstock over wood-plastic composite railings.	
General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Features	• High Gloss • Weather Resistant
Uses	• Capstock • Decorative Railing • Profiles • Construction Applications • Fencing & Decking • Windows & Doors
Forms	• Cube
Processing Method	• Extrusion

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.20	1.20	ASTM D792
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	325000 psi	2240 MPa	ASTM D638
Tensile Strength ² (Yield)	6700 psi	46.2 MPa	ASTM D638
Flexural Modulus	330000 psi	2280 MPa	ASTM D790
Flexural Strength	9900 psi	68.3 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	2.3 ft·lb/in	120 J/m	ASTM D256A
Drop Impact Resistance 73°F (23°C) ³ 73°F (23°C) ⁴	1.11 in·lb/mil > 4.00 in·lb/mil	49.4 J/cm > 178 J/cm	ASTM D4226
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	81	81	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load ⁵ 66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	184 °F	84.4 °C	ASTM D648
Deflection Temperature Under Load ⁵ 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	168 °F	75.6 °C	ASTM D648
CLTE - Flow	4.7E-5 in/in/°F	8.5E-5 cm/cm/°C	ASTM D696

Additional Information
Physical properties based on Geon Bold L5500 Brown 3566.

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	380 to 400 °F	193 to 204 °C

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Extrusion Notes

Melt flow different but downstream calibration similar to standard rigid PVC.

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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