Geon™ Bold L5800

Polyvinyl Chloride Alloy

Key Characteristics

Product Description

PVC alloy for dark color capstock requiring premium weathering in both horizontal and vertical applications. Comes in satin gloss but may be customized for an application. Best option for lower heat build-up "jet black".

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Medium Gloss	• Weather Resistant	
Uses	• Capstock • Construction Applications	• Decorative Railing • Windows & Doors	
Forms	• Cube		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.28	1.28	ASTM D792
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	323000 psi	2230 MPa	ASTM D638
Tensile Strength [2] (Yield)	4580 psi	31.6 MPa	ASTM D638
Tensile Elongation [2] (Break)	55 %	55 %	ASTM D638
Flexural Modulus [3]	340000 psi	2340 MPa	ASTM D790
Flexural Strength [3] (Yield)	11500 psi	79.3 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256
0.125 in (3.18 mm), Compression Molded	0.50 ft·lb/in	27 J/m	
Drop Impact Resistance			ASTM D4226
73°F (23°C) [4]	1.33 in·lb/mil	59.2 J/cm	
73°F (23°C) [5]	> 4.00 in·lb/mil	> 178 J/cm	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore D, 15 sec)	79	79	ASTM D2240
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load [6]			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	141 °F	60.7 °C	
Deflection Temperature Under Load [6]			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	122 °F	49.9 °C	
CLTE - Flow	4.0E-5 in/in/°F	7.2E-5 cm/cm/°C	ASTM D696

Additional Information

Physical properties based on Geon Bold L5800 LHB Black 2880.

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	300 to 350 °F	149 to 177 °C

Extrusion Notes

Melt flow, extrusion conditions and downstream calibration likely to be different than standard rigid PVC. Wet vacuum calibration is recommended instead of dry calibration.

Notes

[1] Typical values are not to be construed as specifications.

[2] Type I, 0.20 in/min (5.1 mm/min)

[3] 2.0 in/min (51 mm/min)

[4] Procedure A, .125"

[5] Procedure B, .125"

[6] Conditioned at 50 deg.C

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