



Geon™ Fiberloc™ 83520

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• General Purpose	• High Flow	
Uses	• Construction Applications	• General Purpose	• Outdoor Applications
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.52	1.52	ASTM D792
Spiral Flow	30.0 in	76.2 cm	
Molding Shrinkage - Flow	5.0E-4 to 1.5E-3 in/in	0.050 to 0.15 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	950000 psi	6550 MPa	ASTM D638
Tensile Strength ² (Yield)	9500 psi	65.5 MPa	ASTM D638
Tensile Elongation ² (Break)	2.0 %	2.0 %	ASTM D638
Flexural Modulus	900000 psi	6210 MPa	ASTM D790
Flexural Strength	15000 psi	103 MPa	ASTM D790
Poisson's Ratio	0.42	0.42	ASTM E132
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.2 ft·lb/in	64 J/m	ASTM D256A
Unnotched Izod Impact ³ 73°F (23°C), 0.125 in (3.18 mm)	6.0 ft·lb/in	320 J/m	ASTM D4812
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	83	83	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	169 °F	76.1 °C	ASTM D648
CLTE - Flow	1.5E-5 in/in/°F	2.7E-5 cm/cm/°C	ASTM D696
RTI Elec	122 °F	50.0 °C	UL 746
RTI Imp	122 °F	50.0 °C	UL 746
RTI Str	122 °F	50.0 °C	UL 746
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm), ALL)	• V-0 • 5VA	• V-0 • 5VA	UL 94

Additional Information

Note: Test results are based on natural formulation and may vary with pigmentation and fiber orientation. All materials should be tested and approved for each specific end-use application in the intended color.

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	390 to 410 °F	199 to 210 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

³ Injection Molded

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