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
Density / 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			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.2 ft·lb/in	64 J/m	
Unnotched Izod Impact [3]			ASTM D4812
73°F (23°C), 0.125 in (3.18 mm)	6.0 ft·lb/in	320 J/m	
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			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	169 °F	76.1 °C	
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.

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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