Geon™ HTX M6307

Polyvinyl Chloride Alloy

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Flow	• Low Temperature Impact Resistance	
Uses	• Construction Applications • Electrical/Electronic Applications	• Outdoor Applications • Telecommunications	
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.23	1.23	ASTM D792
Spiral Flow	30.0 in	76.2 cm	
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
Outdoor Suitability (Gray)	f1	f1	UL 746C
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	250000 psi	1720 MPa	ASTM D638
Tensile Strength [2] (Yield)	4300 psi	29.6 MPa	ASTM D638
Tensile Elongation [2] (Break)	94 %	94 %	ASTM D638
Flexural Modulus	260000 psi	1790 MPa	ASTM D790
Flexural Strength	7300 psi	50.3 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256A
-40°F (-40°C), 0.125 in (3.18 mm), Injection Molded	3.0 ft·lb/in	160 J/m	
0°F (-18°C), 0.125 in (3.18 mm), Injection Molded	7.0 ft·lb/in	370 J/m	
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	11 ft·lb/in	590 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	14 ft·lb/in	750 J/m	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore D)	75	75	ASTM D2240
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	165 °F	73.9 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	178 °F	81.1 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	156 °F	68.9 °C	

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)	165 °F	73.9 °C	
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 (0.08 in (2.0 mm), ALL)	• V-0 • 5VA	• V-0 • 5VA	UL 94

Additional Information	Typical Value (English)	Typical Value (SI)
QUV Weatherometer [3]	0.58 %	0.58 %

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	155 °F	68 °C
Drying Time	2.0 hr	2.0 hr
Processing (Melt) Temp	395 to 405 °F	202 to 207 °C

Notes

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

[2] Type I, 2.0 in/min (51 mm/min)

[3] 351 Lamp, All Colors, detla E (CIE), 24 hrs light, 300 hrs, No Moisutre

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