Geon™ HTX M6829

Polyvinyl Chloride Alloy

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• High Flow	• Medium Impact Resistance
Uses	• Electrical/Electronic Applications	• General Purpose	• Telecommunications
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.16	1.16	ASTM D792
Spiral Flow	34.0 in	86.4 cm	
Molding Shrinkage - Flow	4.0E-3 to 5.0E-3 in/in	0.40 to 0.50 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	340000 psi	2340 MPa	ASTM D638
Tensile Strength [2] (Yield)	5700 psi	39.3 MPa	ASTM D638
Tensile Elongation [2] (Break)	20 %	20 %	ASTM D638
Flexural Modulus	340000 psi	2340 MPa	ASTM D790
Flexural Strength	10200 psi	70.3 MPa	ASTM D790
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	7.0 ft·lb/in	370 J/m	
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)	181 °F	82.8 °C	
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	192 °F	88.9 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	171 °F	77.2 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	187 °F	86.1 °C	
Vicat Softening Point	196 °F	91 °C	
RTI Elec	176 °F	80.0 °C	UL 746
RTI Imp	158 °F	70.0 °C	UL 746
RTI Str	176 °F	80.0 °C	UL 746
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.12 in (3.0 mm), ALL)	V-1	V-1	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	400 to 410 °F	204 to 210 °C

Notes

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

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

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