



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
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	

Copyright © 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

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)	165 °F	73.9 °C	ASTM D648
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 (0.0790 in (2.01 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	68.3 °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, delta E (CIE), 24 hrs light, 300 hrs, No Moisture

CONTACT INFORMATION

Americas	Asia	Europe
United States - Avon Lake +1 440 930 1000	China - Guangzhou +86 20 8732 7260	Germany - Gaggenau +49 7225 6802 0
United States - McHenry +1 815 385 8500	China - Shenzhen +86 755 2969 2888	Spain - Barbastro (Huesca) +34 974 310 314
	China - Suzhou +86 512 6823 24 38	
	China - Suzhou +86 512 6265 2600	
	Hong Kong - +852 2690 5332	
	Taiwan - Yonghe City, +886 9396 99740, +886 2929 1849	



*Beyond Polymers.
Better Business Solutions.™*

www.polyone.com

PolyOne Americas 33587 Walker Road Avon Lake, Ohio 44012 United States +1 440 930 1000 +1 866 POLYONE	PolyOne Asia No. 88 Guoshoujing Road Z.J Hi-tech Park, Pudong Shanghai, 201203, China +86 21 5080 1188	PolyOne Europe 6 Giällewee +352 269 050 35
---	---	---

Copyright ©, 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.