

GEON® Plus M7020

GEON Performance Solutions - Rigid Polyvinyl Chloride

Tuesday, June 18, 2024

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Impact Modifier		
Features	• General Purpose	• High Flow	• Impact Modified
Uses	• Medical Devices		
Agency Ratings	• UL 94 5VA	• UL 94 V-0	
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.33	1.33	ASTM D792
Spiral Flow	47.0 in	119 cm	
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ²	330000 psi	2280 MPa	ASTM D638
Tensile Strength ² (Yield)	6000 psi	41.4 MPa	ASTM D638
Tensile Elongation ² (Break)	35 %	35 %	ASTM D638
Flexural Modulus	335000 psi	2310 MPa	ASTM D790
Flexural Strength	9100 psi	62.7 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
0°F (-18°C), 0.125 in (3.18 mm), Injection Molded	2.0 ft·lb/in	110 J/m	
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	5.0 ft·lb/in	270 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	12 ft·lb/in	640 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	79	79	ASTM D2240

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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	153 °F	67.2 °C	
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	160 °F	71.1 °C	
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	140 °F	60.0 °C	
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	158 °F	70.0 °C	
RTI Elec	194 °F	90.0 °C	UL 746B
RTI Imp	185 °F	85.0 °C	UL 746B
RTI Str	194 °F	90.0 °C	UL 746B
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.07 in (1.8 mm), ALL)	• V-0 • 5VA	• V-0 • 5VA	UL 94
CSA Flammability ³ (63.0 mil (1.60 mm))	5VA	5VA	

Processing Information

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

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type I, 2.0 in/min (51 mm/min)

³ All Colors

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