

GEON® Rigid M4300

GEON Performance Solutions - Rigid Polyvinyl Chloride

Thursday, November 2, 2023

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Impact Modifier		
Features	• General Purpose	• Impact Modified	
Uses	• Fluid Handling • General Purpose		
Agency Ratings	• NSF	• NSF STD-61	
Appearance	• Clear/Transparent		
Forms	• Pellets		

ASTM & ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.32	1.32	ASTM D792
Spiral Flow	23.0 in	58.4 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	410000 psi	2830 MPa	ASTM D638
Tensile Strength ² (Yield)	7900 psi	54.5 MPa	ASTM D638
Tensile Elongation ² (Break)	30 %	30 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength	11500 psi	79.3 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
32°F (0°C), 0.125 in (3.18 mm), Injection Molded	1.0 ft·lb/in	53 J/m	
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	16 ft·lb/in	850 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	81	81	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	158 °F	70.0 °C	
66 psi (0.45 MPa), Annealed, 0.250 in (6.35 mm)	169 °F	76.1 °C	
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	154 °F	67.8 °C	
264 psi (1.8 MPa), Annealed, 0.250 in (6.35 mm)	163 °F	72.8 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm), ALL	V-0	V-0	
0.08 in (1.9 mm), ALL	5VA	5VA	

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Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance ³ (125.0 mil (3175 µm))	78.0 %	78.0 %	ASTM D1003
Haze (125.0 mil (3175 µm))	4.00 %	4.00 %	ASTM D1003

Processing Information

Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	390 to 400 °F	199 to 204 °C

Notes

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

² Type I, 2.0 in/min (51 mm/min)

³ CIE Illuminant C

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