



Geon™ Vinyl Flexible A7001

Flexible Polyvinyl Chloride

Key Characteristics

Product Description

Interior compound used primarily in transparent applications. This product is registered under UL 94 HB specifications @ 3.0 and 1.5 mm. thickness and all colors.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose • High Gloss		
Uses	• General Purpose		
Agency Ratings	• NSF 51 ¹	• UL 94 ²	
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties³

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.17	1.17	ASTM D792
Molding Shrinkage - Flow	0.019 to 0.023 in/in	1.9 to 2.3 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ⁴ (100% Strain)	660 psi	4.55 MPa	ASTM D638
Tensile Strength ⁴ (Break)	1600 psi	11.0 MPa	ASTM D638
Tensile Elongation ⁴ (Break)	450 %	450 %	ASTM D638
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tear Strength ⁵	230 lbf/in	40.3 kN/m	ASTM D624
Compression Set (73°F (23°C), 22 hr)	18 %	18 %	ASTM D395
Clash-Berg Modulus			ASTM D1043
--	5400 psi	37.2 MPa	
-62°F (-52°C)	45000 psi	310 MPa	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A	70	70	
Shore A, 15 sec	59	59	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Brittleness Temperature	-60.0 °F	-51.1 °C	ASTM D746
Optical	Typical Value (English)	Typical Value (SI)	Test Method
Transmittance ⁶ (75.0 mil (1910 µm))	82.0 %	82.0 %	ASTM D1003
Haze (75.0 mil (1910 µm))	4.0 %	4.0 %	ASTM D1003

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	380 to 400 °F	193 to 204 °C
Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	340 to 350 °F	171 to 177 °C

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Notes

- ¹ Trans 9423.
Max. Temp. of use = 100 deg. F.

- ² HB, ALL COLORS, (1.5 and 3.0 mm).

- ³ Typical values are not to be construed as specifications.

- ⁴ 20 in/min (510 mm/min)

- ⁵ Die C, 20 in/min (510 mm/min)

- ⁶ CIE Illuminant C

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