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 STD-51 [1]	• UL 94 [2]	
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [3]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.18	1.18	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] (Break)	1600 psi	11.0 MPa	ASTM D638
Tensile Elongation [4] (Break)	400 %	400 %	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
--	5300 psi	36.5 MPa	
-62°F (-52°C)	43500 psi	300 MPa	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 15 sec)	59	59	ASTM D2240
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))	4.00 %	4.00 %	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

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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