Geon™ Vinyl Flexible A9000

Flexible Polyvinyl Chloride

Key Characteristics

Product Description			
Interior applications.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• High Gloss	
Uses	• Film • General Purpose	• Hose • Sheet	• Tubing
Agency Ratings	• NSF 51 [1]		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [2]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.24	1.24	ASTM D792
Molding Shrinkage - Flow	0.013 to 0.017 in/in	1.3 to 1.7 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [3] (100% Strain)	1580 psi	10.9 MPa	ASTM D638
Tensile Strength [3] (Break)	2700 psi	18.6 MPa	ASTM D638
Tensile Elongation [3] (Break)	390 %	390 %	ASTM D638
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tear Strength [4]	490 lbf/in	85.8 kN/m	ASTM D624
Compression Set (73°F (23°C), 22 hr)	37 %	37 %	ASTM D395
Clash-Berg Modulus			ASTM D1043
--	79000 psi	545 MPa	
-11°F (-24°C)	45000 psi	310 MPa	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A	90	90	
Shore A, 15 sec	84	84	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Brittleness Temperature	-29.0 °F	-33.9 °C	ASTM D746
Optical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Transmittance [5] (75.0 mil (1910 µm))	80.0 %	80.0 %	ASTM D1003
Haze (75.0 mil (1910 µm))	5.0 %	5.0 %	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	350 to 360 °F	177 to 182 °C

Notes

[1] Trans 9000 and Trans 9400.
Max. Temperature of use = 100 degrees F.

[2] Typical values are not to be construed as specifications.

[3] 20 in/min (510 mm/min)

[4] Die C, 20 in/min (510 mm/min)

[5] CIE Illuminant C

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