



Geon™ Vinyl Flexible R312AE

Flexible Polyvinyl Chloride

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Additive	• Biocide • UV Stabilizer
Features	• Flame Retardant • Oil Resistant • Good Chemical Resistance • UV Absorbing
Uses	• Construction Applications • Flooring
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.30	1.30	ASTM D792
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Break)	2300 psi	15.9 MPa	ASTM D638
Tensile Elongation ² (Break)	370 %	370 %	ASTM D638
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 15 sec)	66	66	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Brittleness Temperature	-35.0 °F	-37.2 °C	ASTM D746
Aging	Typical Value (English)	Typical Value (SI)	Test Method
Change in Mass			ASTM D543
73°F (23°C), 120 hr, in Mineral Oil	0.90 %	0.90 %	
73°F (23°C), 120 hr, in Vegetable Oil	0.90 %	0.90 %	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Oxygen Index (0.125 in (3.18 mm))	28 %	28 %	ASTM D2863
Additional Information	Typical Value (English)	Typical Value (SI)	Test Method
Volatile Loss ³			ASTM D1203B
194°F (90°C), 75.0 mil (1.91 mm)	0.90 %	0.90 %	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	370 to 390 °F	188 to 199 °C
Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	340 to 355 °F	171 to 179 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type IV, 20 in/min (510 mm/min)

³ Method A

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