



Geon™ Vinyl Packaging 1699

Rigid Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• High Gloss	• High Impact Resistance
Uses	• Bottles	• General Purpose	• Packaging
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.32	1.32	ASTM D792
Density	0.801 g/cm ³	0.801 g/cm ³	ASTM D1505
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	326000 psi	2240 MPa	ASTM D638
Tensile Strength ² (Yield)	6100 psi	42.1 MPa	ASTM D638
Flexural Modulus	356000 psi	2460 MPa	ASTM D790
Flexural Strength	9550 psi	65.8 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	21 ft·lb/in	1100 J/m	ASTM D256A
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	79	79	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	139 °F	59.4 °C	ASTM D648
Optical	Typical Value (English)	Typical Value (SI)	Test Method
Transmittance			Internal Method
30.0 mil (762 μm), 400 nm	7.5 %	7.5 %	
30.0 mil (762 μm), 700 nm	38.5 %	38.5 %	
Additional Information	Typical Value (English)	Typical Value (SI)	
Blow Molding Temperature	385 to 410 °F	196 to 210 °C	

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)