



Geon™ Vinyl Packaging 161J-1

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
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Blow Molding		

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	334000 psi	2300 MPa	ASTM D638
Tensile Strength ³ (Yield)	6500 psi	44.8 MPa	ASTM D638
Flexural Modulus	384000 psi	2650 MPa	ASTM D790
Flexural Strength	12100 psi	83.4 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	20 ft·lb/in	1100 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	105	105	ASTM D785
Durometer Hardness (Shore D)	80	80	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	157 °F	69.4 °C	
Optical	Typical Value (English)	Typical Value (SI)	Test Method
Transmittance			Internal Method
33.5 mil (851 µm), 400 nm	80.5 %	80.5 %	
33.5 mil (851 µm), 700 nm	86.5 %	86.5 %	
Additional Information	Typical Value (English)	Typical Value (SI)	
Blow Molding Temperature	390 to 415 °F	199 to 213 °C	

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

³ Type I, 2.0 in/min (51 mm/min)