



Geon™ Vinyl Packaging 2188GC

Rigid Polyvinyl Chloride

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Features	• Food Contact Acceptable • High Gloss • High Impact Resistance
Uses	• Bottles • Packaging
Agency Ratings	• FDA Food Contact, Unspecified Rating
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	346000 psi	2390 MPa	ASTM D638
Tensile Strength ² (Yield)	6300 psi	43.4 MPa	ASTM D638
Flexural Modulus	374000 psi	2580 MPa	ASTM D790
Flexural Strength	11200 psi	77.2 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
Rockwell Hardness (R-Scale)	105	105	ASTM D785
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
33.5 mil (851 µm), 400 nm	81.0 %	81.0 %	
33.5 mil (851 µm), 700 nm	86.5 %	86.5 %	
Additional Information	Typical Value (English)	Typical Value (SI)	
Blow Molding Temperature	395 to 415 °F	202 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)