



Geon™ BIO RC6500

Flexible Polyvinyl Chloride

Key Characteristics

Product Description

A flexible vinyl formulated to achieve a minimum level of 25% bio-based content and classified as a PolyOne Sustainable Solution

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Non-Phthalate Plasticizer	• Renewable Resource Content	
Uses	• Building Materials	• Consumer Applications	• Industrial Applications
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.35	1.35	ASTM D792
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (100% Strain)	459 psi	3.16 MPa	ASTM D638
Tensile Strength ² (Break)	1340 psi	9.20 MPa	ASTM D638
Tensile Elongation ² (Break)	420 %	420 %	ASTM D638
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tear Strength ³	167 lbf/in	29.2 kN/m	ASTM D624
Compression Set (73°F (23°C), 22 hr)	25 %	25 %	ASTM D395
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A	56	56	
Shore A, 15 sec	58	58	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Brittleness Temperature	-28.5 °F	-33.6 °C	ASTM D746
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Oxygen Index	21 %	21 %	ASTM D2863

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	335 to 345 °F	168 to 174 °C

Notes

¹ Typical values are not to be construed as specifications.

² 20 in/min (510 mm/min)

³ Die C, 20 in/min (510 mm/min)

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