



Geon™ BIO RA9000

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
Density / Specific Gravity	1.24	1.24	ASTM D792
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (100% Strain)	1770 psi	12.2 MPa	ASTM D638
Tensile Strength ² (Break)	2830 psi	19.5 MPa	ASTM D638
Tensile Elongation ² (Break)	320 %	320 %	ASTM D638
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A	93	93	
Shore A, 15 sec	85	85	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Brittleness Temperature	-20.5 °F	-29.2 °C	ASTM D746
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Oxygen Index	25 %	25 %	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	340 to 360 °F	171 to 182 °C

Notes

¹ Typical values are not to be construed as specifications.

² 20 in/min (510 mm/min)