Geon™ BIO RA551S

Flexible Polyvinyl Chloride

Key Characteristics

Product Description			
A Cellular 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	• Expandable	• Non-Phthalate Plasticizer	
Uses	• Footwear	• Sporting Goods	
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity			ASTM D792
-- [2]	0.760	0.760	
-- [3]	1.10	1.10	
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [4, 5] (100% Strain)	450 psi	3.10 MPa	ASTM D638
Tensile Strength [4, 5] (Break)	1100 psi	7.58 MPa	ASTM D638
Tensile Elongation [4, 5] (Break)	410 %	410 %	ASTM D638
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness [5] (Shore A, 15 sec)	50	50	ASTM D2240
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Brittleness Temperature [3]	-49.0 °F	-45.0 °C	ASTM D746

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	330 to 340 °F	166 to 171 °C
Extrusion	**Typical Value (English)**	**Typical Value (SI)**
Melt Temperature	320 to 330 °F	160 to 166 °C

Notes

[1] Typical values are not to be construed as specifications.

[2] Blown test specimen(24 hrs. @ 90C.)

[3] Solid test specimen

[4] 20 in/min (510 mm/min)

[5] Solid test specimen.