



Geon™ BIO RC9000

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 | 1.45 | 1.45 | ASTM D792 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength ² (100% Strain) | 1450 psi | 10.0 MPa | ASTM D638 |
| Tensile Strength ² (Break) | 2230 psi | 15.4 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 | 92 | 92 | |
| Shore A, 15 sec | 86 | 86 | |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Brittleness Temperature | -12.5 °F | -24.7 °C | ASTM D746 |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Oxygen Index | 23 % | 23 % | 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)

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