



Geon™ Vinyl Flexible R8180K

Flexible Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Lead Stabilizer		
Features	• Flame Retardant		
Uses	• Building Wire Insulation	• Wire & Cable Applications	
Wire Types	• NMD90		
Forms	• Pellets		
Processing Method	• Extrusion Coating		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.41	1.41	ASTM D792
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Yield)	2600 psi	17.9 MPa	ASTM D638
Tensile Elongation ² (Break)	340 %	340 %	ASTM D638
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 15 sec)	85	85	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Brittleness Temperature	-7.60 °F	-22.0 °C	ASTM D746
Aging	Typical Value (English)	Typical Value (SI)	
Retention of Tensile Elongation ³ 250°F (121°C), 75.0 mil (1.91 mm)	80 %	80 %	
Retention of Tensile Strength ³ 250°F (121°C), 75.0 mil (1.91 mm)	110 %	110 %	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Volume Resistivity	8.2E+14 ohms·cm	8.2E+14 ohms·cm	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Oxygen Index (0.0750 in (1.91 mm))	28 %	28 %	ASTM D2863

Additional Information

NOTE: Typical Properties of Molded Slab (0.075"); Not to be Construed as Specifications.

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	329 to 347 °F	165 to 175 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type IV, 20 in/min (510 mm/min)

³ 500 hr, UL Standard

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