

GEON® Flex R8180K

GEON Performance Solutions - Flexible Polyvinyl Chloride

Monday, June 17, 2024

General Information

General			
Material Status	• Commercial: Active		
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		

ASTM & ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.41	1.41	ASTM D792
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	2600 psi	17.9 MPa	ASTM D638
Tensile Elongation ² (Break)	340 %	340 %	ASTM D638
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A, 15 sec)	85	85	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-7.60 °F	-22.0 °C	ASTM D746
Aging	Nominal Value (English)	Nominal 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	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity	8.2E+14 ohms·cm	8.2E+14 ohms·cm	ASTM D257
Flammability	Nominal Value (English)	Nominal 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	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	329 to 347 °F	165 to 175 °C

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type IV, 20 in/min (510 mm/min)

³ 500 hr, UL Standard

IMPORTANT: The information contained herein is believed to be accurate, but this information should not be construed as a product specification. It is offered for your consideration, investigation, testing, and verification. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end-product performance. Due to variations in methods, conditions, and equipment used commercially to process this product, no warranties or guarantees are made as to the suitability of this product for any particular application. Full-scale testing and end product performance are the responsibility of the user. GEON Performance Solutions is not liable for and the user assumes all risk and liability of any use or handling of this product. GEON PERFORMANCE SOLUTIONS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.