

Ryton® R-7-190NA

polyphenylene sulfide

Ryton® R-7-190NA glass fiber and mineral filled polyphenylene sulfide compound provides enhanced

strength and low maintenance molding using conventional molding equipment.

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Filler / Reinforcement	• Glass\Mineral	
Features	• Chemical Resistant • Good Electrical Properties	• Good Strength
RoHS Compliance	• RoHS Compliant	
Appearance	• Natural Color	
Forms	• Pellets	

Physical

	Typical Value	Unit	Test method
Density ¹	2.00	g/cm ³	ISO 1183
Water Absorption (24 hr, 23°C)	0.020	%	ASTM D570
Mold Shrinkage ²			
Flow	0.20	%	
Transverse	0.40	%	

Mechanical

	Typical Value	Unit	Test method
Tensile Strength	150	MPa	ISO 527
Tensile Elongation (Break)	1.0	%	ISO 527
Flexural Modulus	18000	MPa	ISO 178
Flexural Strength	230	MPa	ISO 178
Compressive Strength	275	MPa	ISO 604

Impact

	Typical Value	Unit	Test method
Notched Izod Impact Strength	6.0	kJ/m ²	ISO 180/A
Unnotched Izod Impact Strength	22	kJ/m ²	ISO 180

Thermal

	Typical Value	Unit	Test method
CLTE			ISO 11359-2
Flow : -50 to 50°C	1.5E-5	cm/cm/°C	
Flow : 100 to 200°C	1.5E-5	cm/cm/°C	
Transverse : -50 to 50°C	2.5E-5	cm/cm/°C	
Transverse : 100 to 200°C	6.5E-5	cm/cm/°C	
Thermal Conductivity	0.64	W/m/K	ASTM E1530
Heat Deflection Temperature - 1.8 MPa	265	°C	ASTM D648
Temperature Index	220 to 240	°C	UL 746B

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Electrical	Typical Value	Unit	Test method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	18	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
25°C, 1 kHz	5.20		
25°C, 1 MHz	5.00		
Dissipation Factor			ASTM D150
25°C, 1 kHz	2.0E-3		
25°C, 1 MHz	2.0E-3		
Arc Resistance	185	sec	ASTM D495
Comparative Tracking Index (CTI)	250	V	UL 746
Insulation Resistance - 95% RH, 48 hr (90°C)	1.00E+13	ohms	

Flammability	Typical Value	Unit	Test method
Flame Rating (1.6 mm)	• •	V-0 5VA	UL 94

Additional Information

Test specimen molding conditions: Stock temperature, 315-345°C; Mold temperature, 135°C

Notes

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

¹ Method A

² Measured on 102 mm x 102 mm x 3.2 mm plaques, edge gated.



Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

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