

Solvay Specialty Polymers Ryton® BR111 Polyphenylene Sulfide Compound (Unverified Data**)

Category : Polymer , Thermoplastic , Polyphenylene Sulfide (PPS) , Polyphenylene Sulfide (PPS), Mineral/Glass-Fiber Filled

Material Notes:

Natural Color Polyphenylene Sulfide Compound Ryton® BR111 is a glass and mineral filled polyphenylene sulfide compounds developed to provide a good combination of mechanical strength and electrical properties. Applications: Servo Pistons Comments: Test specimen molding conditions: Stock Temperature, 315-345°C; Mold Temperature, 135°C; ASTM Values Converted to SI Units Data provided by Chevron Phillips Chemical Company LP. Solvay Specialty Polymers has acquired the Ryton product line.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Ryton-BR111-Polyphenylene-Sulfide-Compound-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	2.00 g/cc	0.0723 lb/in ³	ASTM D792
Water Absorption	0.030 %	0.030 %	ASTM D570
Linear Mold Shrinkage	0.0020 cm/cm	0.0020 in/in	102 mm X 102 mm X 3.2 mm Plaques, Edge Gated
Linear Mold Shrinkage, Transverse	0.0050 cm/cm	0.0050 in/in	Measured on 102 mm X 102 mm X 3.2 mm Plaques, Edge Gated

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	160 MPa	23200 psi	ASTM D638
Elongation at Break	1.0 %	1.0 %	ASTM D638
Flexural Yield Strength	250 MPa	36300 psi	ASTM D790
Flexural Modulus	21.0 GPa	3050 ksi	ASTM D790
Compressive Yield Strength	275 MPa	39900 psi	ASTM D695
Izod Impact, Notched	0.700 J/cm	1.31 ft-lb/in	ASTM D256
Izod Impact, Unnotched	3.50 J/cm	6.56 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	12.0 µm/m-°C	6.67 µin/in-°F	Axial; ASTM E831
	@Temperature 100 - 200 °C	@Temperature 212 - 392 °F	
	14.0 µm/m-°C	7.78 µin/in-°F	Axial; ASTM E831
	@Temperature -50.0 - 50.0 °C	@Temperature -58.0 - 122 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Transverse to Flow	64.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	35.6 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ASTM E831
	@Temperature 20.0 $^\circ\text{C}$	@Temperature 68.0 $^\circ\text{F}$	
	64.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	35.6 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ASTM E831
	@Temperature 100 - 200 $^\circ\text{C}$	@Temperature 212 - 392 $^\circ\text{F}$	
Thermal Conductivity	0.510 W/m-K	3.54 BTU-in/hr-ft ² - $^\circ\text{F}$	
Maximum Service Temperature, Air	220 $^\circ\text{C}$	428 $^\circ\text{F}$	UL Temperature Index 220 / 240 per UL746B
Deflection Temperature at 1.8 MPa (264 psi)	≥ 260 $^\circ\text{C}$	≥ 500 $^\circ\text{F}$	Annealed 2 hr @ 200 $^\circ\text{C}$; ASTM D660
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	2.00e+13 ohm-cm	2.00e+13 ohm-cm	ASTM D257
Dielectric Constant	4.8	4.8	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
	4.9	4.9	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	18.0 kV/mm	457 kV/in	ASTM D149
Dissipation Factor	0.0020	0.0020	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	0.0030	0.0030	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Arc Resistance	180 sec	180 sec	ASTM D495
Comparative Tracking Index	225 V	225 V	UL 746A

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China