

Ryton® R-4-270NA

Polyphenylene Sulfide

Solvay Specialty Polymers

Message:

Ryton® R-4-270NA 40% glass fiber reinforced polyphenylene sulfide compound provides enhanced mechanical strength after constant or repeated exposure to high temperature water.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 40% filler by weight		
Features	High strength		
	Workability, good		
	Good chemical resistance		
RoHS Compliance	RoHS compliance		
Appearance	Natural color		
Forms	Particle		
Physical	Nominal Value	Unit	Test Method
Specific Gravity ¹	1.67	g/cm ³	ISO 1183
Molding Shrinkage ²			
Flow: 3.20mm	0.20	%	
Transverse flow: 3.20mm	0.50	%	
Water Absorption (23°C, 24 hr)	0.020	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	190	MPa	ISO 527
Tensile Elongation (Break)	1.8	%	ISO 527
Flexural Modulus	13000	MPa	ISO 178
Flexural Stress	280	MPa	ISO 178
Compressive Strength	285	MPa	ASTM D695
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	9.0	kJ/m ²	ISO 180/A
Unnotched Izod Impact Strength	45	kJ/m ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	265	°C	ASTM D648
Linear thermal expansion coefficient			ISO 11359-2
Flow: -50 to 50°C	1.5E-5	cm/cm/°C	ISO 11359-2
Flow: 100 to 200°C	1.0E-5	cm/cm/°C	ISO 11359-2
Horizontal: -50 to 50°C	4.5E-5	cm/cm/°C	ISO 11359-2
Lateral: 100 to 200°C	8.5E-5	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.32	W/m/K	ASTM E1530
Electrical	Nominal Value	Unit	Test Method

Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	20	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
25°C, 1 kHz	4.00		ASTM D150
25°C, 1 MHz	4.00		ASTM D150
Dissipation Factor			ASTM D150
25°C, 1 kHz	2.0E-3		ASTM D150
25°C, 1 MHz	2.0E-3		ASTM D150
Arc Resistance	125	sec	ASTM D495
Comparative Tracking Index (CTI)	130	V	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating ³ (1.6 mm)	V-0		UL 94
Additional Information	Nominal Value	Unit	
Hydrolytic Stability ⁴			
Tensile Strength Retained	> 75	%	
Weight Gain		%	

NOTE

1. Method A
2. Measured on 102 mm x 102 mm x 3.2 mm plaques, edge gated.
3. This product is not currently UL listed; test results indicate this level of performance.
4. Test specimens aged 1000 hours in water at 140°C (248°F).

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT