

## Solvay Specialty Polymers Ryton® XE4050BL Polyphenylene Sulfide Alloy (PPS Alloy), GlassMineral Filled

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

### Material Notes:

Ryton® XE4050BL glass fiber and mineral filled polyphenylene sulfide alloy compound provides high ductility and impact strength along with good thermal stability. Features: Ductile; Good Thermal Stability; High Impact Resistance. Information provided by Solvay Specialty Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-Ryton-XE4050BL-Polyphenylene-Sulfide-Alloy-PPS-Alloy-GlassMineral-Filled.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Ryton-XE4050BL-Polyphenylene-Sulfide-Alloy-PPS-Alloy-GlassMineral-Filled.php)

Physical Properties	Metric	English	Comments
Density	1.68 g/cc	0.0607 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.050 % @Time 86400 sec	0.050 % @Time 24.0 hour	ISO 62
Linear Mold Shrinkage, Flow	0.0020 cm/cm @Thickness 3.18 mm	0.0020 in/in @Thickness 0.125 in	
Linear Mold Shrinkage, Transverse	0.0040 cm/cm @Thickness 3.20 mm	0.0040 in/in @Thickness 0.126 in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	74	74	ASTM D785
Hardness, Rockwell R	110	110	ASTM D785
Tensile Strength	124 MPa	18000 psi	ASTM D638
Tensile Stress	135 MPa	19600 psi	ISO 527-2
Elongation at Break	1.9 %	1.9 %	ISO 527-2
	1.9 %	1.9 %	ASTM D638
Flexural Strength	186 MPa	27000 psi	ASTM D790
	195 MPa	28300 psi	ISO 178
Flexural Modulus	10.0 GPa	1450 ksi	ISO 178
	10.3 GPa	1490 ksi	ASTM D790
Compressive Strength	200 MPa	29000 psi	ASTM D695

Poissons Ratio Mechanical Properties	0.37 Metric	0.37 English	ASTM E132 Comments
Izod Impact, Notched	0.800 J/cm @Thickness 3.18 mm	1.50 ft-lb/in @Thickness 0.125 in	ASTM D256
Izod Impact, Unnotched	6.40 J/cm @Thickness 3.18 mm	12.0 ft-lb/in @Thickness 0.125 in	ASTM D256
Izod Impact, Notched (ISO)	8.00 kJ/mÂ²	3.81 ft-lb/inÂ²	Notch A; ISO 180
Izod Impact, Unnotched (ISO)	40.0 kJ/mÂ²	19.0 ft-lb/inÂ²	ISO 180

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	10.0 Âµm/m-Â°C @Temperature 100 - 200 Â°C	5.56 Âµin/in-Â°F @Temperature 212 - 392 Â°F	2
	20.0 Âµm/m-Â°C @Temperature -50.0 - 50.0 Â°C	11.1 Âµin/in-Â°F @Temperature -58.0 - 122 Â°F	2
CTE, linear, Transverse to Flow	50.0 Âµm/m-Â°C @Temperature -50.0 - 50.0 Â°C	27.8 Âµin/in-Â°F @Temperature -58.0 - 122 Â°F	TMA; ASTM E831
	85.0 Âµm/m-Â°C @Temperature 100 - 200 Â°C	47.2 Âµin/in-Â°F @Temperature 212 - 392 Â°F	TMA; ASTM E831
Thermal Conductivity	0.370 W/m-K	2.57 BTU-in/hr-ftÂ²-Â°F	ASTM C177
Deflection Temperature at 1.8 MPa (264 psi)	250 Â°C	482 Â°F	Unannealed; ASTM D648
Flammability, UL94	V-0 @Thickness 1.60 mm	V-0 @Thickness 0.0630 in	
Oxygen Index	25 %	25 %	ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	ASTM D257
Surface Resistance	1.00e+16 ohm	1.00e+16 ohm	ASTM D257
Insulation Resistance	1.00e+11 ohm @Temperature 90.0 Â°C	1.00e+11 ohm @Temperature 194 Â°F	IEC 60167

Electrical Properties	<sup>4.2</sup> Metric	<sup>4.2</sup> English	Comments
Dielectric Constant	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	ASTM D150
	4.3	4.3	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	20.0 kV/mm	508 kV/in	ASTM D149
Dissipation Factor	0.0030	0.0030	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	0.0080	0.0080	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Arc Resistance	130 sec	130 sec	ASTM D495
Comparative Tracking Index	150 V	150 V	UL 746

Descriptive Properties	Value	Comments
Availability	Asia Pacific	
	Europe	
	Latin America	
	North America	
Color	Black	
Form	Pellets	
RoHS Compliance	RoHS Compliant	

## Contact Songhan Plastic Technology Co.,Ltd.

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