

## Ryton<sup>®</sup> XE5030BL polyphenylene sulfide alloy

Ryton® XE5030BL 30% glass fiber reinforced polyphenylene sulfide alloy compound provides

high ductility and impact resistance along with good thermal stability.

Material Status	Commercial: Active				
	Asia Pacific	•   (	atin America		
Availability	• Europe	North America			
Filler / Reinforcement	Glass Fiber, 30% Filler by				
Features	Ductile				
	Good Thermal Stability	High Impact Resistance			
Uses	<ul> <li>Industrial Applications</li> </ul>				
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>				
Appearance	• Black				
Forms	Pellets				
Physical		Typical Value	Unit	Test method	
Density / Specific Gravity		1.51		ASTM D792	
Molding Shrinkage					
Flow : 3.20 mm		0.20	%		
Across Flow : 3.20 mm		0.60	%		
Water Absorption (24 hr, 23°C)		0.050	%	ASTM D570	
Mechanical		Typical Value	Unit	Test method	
Tensile Strength					
		131	MPa	ASTM D638	
		135	МРа	ISO 527-2	
Tensile Elongation (Break)		2.0	%	ASTM D638 ISO 527-2	
Flexural Modulus					
		8960	MPa	ASTM D790	
		9000	MPa	ISO 178	
Flexural Strength					
		193	MPa	ASTM D790	
		200	MPa	ISO 178	
Compressive Strength		210	MPa	ASTM D695	
Poisson's Ratio		0.38		ISO 527	

Notched izod impact     96 J/m     ASTM D256        9.5 kJ/m²     ISO I80/A       Unnotched izod impact     590 J/m     ASTM D4812        45 kJ/m²     ISO I80 J/m       Hardness     Typical Value Unit     Test method       Rockwell Hardness     ASTM D785     ASTM D785       M-Scale     86     ASTM D785       M-Scale     86     ASTM D785       M-Scale     86     ASTM D785       M-Scale     86     ASTM D648       18 MPa, Unannealed     250 °C     CLTE       CLTE     ASTM D648     ASTM D648       18 MPa, Unannealed     250 °C     CLTE       Flow : 50 to 50°C     2.0E-5 cm/cm/°C       Transverse : -50 to 50°C     5.5E-5 cm/cm/°C       Transverse : 100 to 200°C     0.0E-5 cm/cm/°C       Thermal Conductivity     0.27 W/m/K     UL       UL Temperature Rating     130 °C     U.746B       Electrical     Typical Value Unit     Test method       Surface Resistivity     1.0E+16 ohms     ASTM D257       Volume Resistivity     1.0E+16 ohms     ASTM D257       Volume Resistivity     1.0E+16 ohms     ASTM D257       Dielectric Strength     2.24 kV/mm     ASTM D257       Dissipation Factor     ASTM D150 <td< th=""><th>Impact</th><th>Typical Value</th><th>Unit</th><th>Test method</th></td<>	Impact	Typical Value	Unit	Test method
9.5 kJ/m³         ISO 180/A           Unnotched Izod Impact         600 J/m         ASTM D4812            4.5 kJ/m³         ISO 180           Hardness         Typical Value Unit         Test method           Rockwell Hardness         ASTM D785           M-Scale         86           R-Scale         10           Thermal         Typical Value Unit           Test method         ASTM D648           L8 MPa, Unannealed         250 °C           CLTE         ASTM E831           Flow : 50 to 50°C         2.06-5 cm/cm/°C           Transverse : -50 to 50°C         3.5E-5 cm/cm/°C           Thermal Conductivity         0.27 W/m/k           UL Temperature Rating         130 °C         UL 746B           Electrical         Typical Value Unit         Test method           Surface Resistivity         1.0E+16 ohms         ASTM D5257           Volume Resistivity         1.0E+16 ohms         ASTM D257           Dielectric Constant         ASTM D150         25°C, 1 kHz           25°C, 1 kHz         3.0E-3         25°C, 1 kHz           25°C, 1 kHz         3.0E-3         25°C, 1 kHz           25°C, 1 kHz         3.0E-3         25°C, 1 kHz	Notched Izod Impact			
Unnotched Izod Impact 318 mm 690 J/m ASTM D4812 45 kJ/m² ISO 180 Hardness Typical Value Unit Test method Rockwell Hardness ASTM D785 M-Scale 86 R-Scale 110 Thermal Typical Value Unit Test method Deflection Temperature Under Load 250 °C CLTE ASTM D648 1.8 MPa, Unannealed 250 °C CLTE ASTM D648 1.8 MPa, Unannealed 250 °C CLTE ASTM E831 Flow : 100 to 200°C 1.0E-5 cm/cm/°C Flow : 100 to 200°C 9.0E-5 cm/cm/°C Transverse : -50 to 50°C 5.5E-5 cm/cm/°C Transverse : 100 to 200°C 9.0E-5 cm/cm/°C Thermal Conductivity 0.27 W/m/K UL Temperature Rating 130 °C UL 746B Electrical Typical Value Unit Test method Surface Resistivity 1.0E+16 ohms ASTM D257 Volume Resistivity 1.0E+16 ohms ASTM D257 Volume Resistivity 1.0E+16 ohms ASTM D257 Volume Resistivity 3.370 Dielectric Strength 22 kV/mm ASTM D150 25°C, 1 kHz 3.80 25°C, 1 kHz 3.80 25°C, 1 kHz 3.6C-3 25°C, 1 kHz 4.6C-3 25°C, 1 k	3.18 mm	96	J/m	ASTM D256
318 mm       690 J/m       ASTM D4812          45 kJ/m²       ISO 180         Hardness       Typical Value Unit       Test method         Rockwell Hardness       ASTM D785         M-Scale       86         R-Scale       110         Thermal       Typical Value Unit       Test method         Deflection Temperature Under Load       ASTM D648       1.8 MPa, Unannealed       250 °C         CLTE       ASTM D648       1.8 MPa, Unannealed       250 °C       C         CLTE       ASTM D648       1.8 MPa, Unannealed       250 °C       C         Flow : -00 to 50°C       2.0E-5 cm/cm/°C       Transverse : -50 to 50°C       5.5E-5 cm/cm/°C         Transverse : 100 to 200°C       9.0E-5 cm/cm/°C       Thermal Conductivity       0.27 W/m/K         UL Temperature Rating       130 °C       UL 746B       Surface Resistivity       1.0E+16 ohms       ASTM D257         Surface Resistivity       1.0E+15 ohms-cm       ASTM D257       Dielectric Constant       ASTM D149         Surface Resistivity       1.0E+16 ohms       ASTM D149       Dielectric Constant       ASTM D150         25°C, 1 MHz       3.06       3.70       Disipation Factor       ASTM D150         25°C, 1 MHz       3.0E-		9.5	kJ/m²	ISO 180/A
45 kJ/m³     ISO 180       Hardness     Typical Value Unit     Test method       Rockwell Hardness     ASTM D785       M-Scale     86       R-Scale     110       Thernal     Typical Value Unit       Test method     ASTM D648       Deflection Temperature Under Load     250 °C       CLTE     ASTM D648       I8 MPa, Unannealed     250 °C       CLTE     ASTM D648       Flow: -50 to 50°C     2.0E-5 cm/cm/°C       Flow: 100 to 200°C     1.0E-5 cm/cm/°C       Transverse :-50 to 50°C     5.5E-5 cm/cm/°C       Transverse :-50 to 50°C     9.0E-5 cm/cm/°C       Transverse : 100 to 200°C     9.0E-5 cm/cm/°C       Thermal Conductivity     0.27 W/m/K       UL Temperature Rating     130 °C       UL Temperature Rating     130 °C       Volume Resistivity     1.0E+15 ohms-cm       Volume Resistivity     1.0E+16 ohms       ASTM D150     25°C, 1 MHz       25°C, 1 MHz     3.0E-3       25°C, 1 MHz     3.0E-3       25°C, 1 MHz     3.0E-3       25°C, 1 MHz     9.0E-3       Arc Resistance     124 sec       Comparative Tracking Index     100 V       Ibsolation Resistance 1 (S0°C)     1.0E+11 ohms       Flormabilit	Unnotched Izod Impact			
Hardness       Typical Value Unit       Test method         Mcockwell Hardness       ASTM D785         M-Scale       86         R-Scale       110         Thermal       Typical Value Unit       Test method         Deflection Temperature Under Load       ASTM D648       1.8 MPa, Unanneoled       250 °C         CLTE       ASTM D648       1.8 MPa, Unanneoled       250 °C         Flow : 50 to 50°C       2.0E-5 cm/cm/°C       Flow : 50 to 50°C       5.5E-5 cm/cm/°C         Transverse : 50 to 50°C       5.5E-5 cm/cm/°C       Transverse : 100 to 200°C       9.0E-5 cm/cm/°C         Transverse : 100 to 200°C       9.0E-5 cm/cm/°C       Transverse : 100 to 200°C       9.0E-5 cm/cm/°C         Transverse : 100 to 200°C       9.0E-5 cm/cm/°C       Transverse : 100 to 200°C       9.0E-5 cm/cm/°C         Transverse : 100 to 200°C       9.0E-5 cm/cm/°C       Transverse : 100 to 200°C       UL 746B         Electrical       Typical Value Unit       Test method       Strimethod         Surface Resistivity       1.0E+16 ohms       ASTM D257         Volume Resistivity       1.0E+15 ohms-cm       ASTM D257         Dielectric Constant       ASTM D150       25°C, 1 MHz       3.70         Dissipation Factor       ASTM D150       25°C, 1 MHz	3.18 mm	690	J/m	ASTM D4812
Rockwell HardnessASTM D785M-Scale86R-Scale110ThermalTypical Value UnitTest methodDeflection Temperature Under Load250 °CCLTEASTM D6481.8 MPa, Unannealed250 °CCLTEASTM E831Flow : -50 to 50°C2.0E-5 cm/cm/°CTransverse : -50 to 50°C5.E-5 cm/cm/°CTransverse : -50 to 50°C5.E-5 cm/cm/°CTransverse : -50 to 50°C9.0E-5 cm/cm/°CTransverse : -50 to 50°C9.0E-5 cm/cm/°CTransverse : -50 to 50°C9.0E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-5 cm/cm/°CThermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL Temperature Rating130 °CUL Temperature Rating1.0E+16 ohmsASTM D257Volume Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+16 ohmsDielectric Strength22 kV/mm25°C, 1 kHz3.8025°C, 1 kHz3.8025°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secComparative Tracking Index100 VInsulation Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlormabilityTypical Value UnitTest methodFlormabilityFlormabilityTypical Value UnitTest Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlormabilityTypical Value UnitFlormabilityTypical Value UnitFlormabilityTypical Value Unit <t< td=""><td></td><td>45</td><td>kJ/m²</td><td>ISO 180</td></t<>		45	kJ/m²	ISO 180
Rockwell HardnessASTM D785M-Scale86R-Scale110ThermalTypical Value UnitTest methodDeflection Temperature Under Load250 °CCLTEASTM D6481.8 MPa, Unannealed250 °CCLTEASTM E831Flow : -50 to 50°C2.0E-5 cm/cm/°CTransverse : -50 to 50°C5.E-5 cm/cm/°CTransverse : -50 to 50°C5.E-5 cm/cm/°CTransverse : -50 to 50°C9.0E-5 cm/cm/°CTransverse : -50 to 50°C9.0E-5 cm/cm/°CTransverse : -50 to 50°C9.0E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-5 cm/cm/°CThermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL Temperature Rating130 °CUL Temperature Rating1.0E+16 ohmsASTM D257Volume Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+16 ohmsDielectric Strength22 kV/mm25°C, 1 kHz3.8025°C, 1 kHz3.8025°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secComparative Tracking Index100 VInsulation Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlormabilityTypical Value UnitTest methodFlormabilityFlormabilityTypical Value UnitTest Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlormabilityTypical Value UnitFlormabilityTypical Value UnitFlormabilityTypical Value Unit <t< td=""><td>Hardness</td><td>Typical Value</td><td>Unit</td><td>Test method</td></t<>	Hardness	Typical Value	Unit	Test method
M-Scale         86 R-Scale           II0           Thermal         Typical Value Unit         Test method           Deflection Temperature Under Load         ASTM D648         1.8 MPa, Unannealed         250 °C           CLTE         ASTM E831         Flow :-50 to 50°C         2.0E-5 cm/cm/°C           Flow :-50 to 50°C         2.0E-5 cm/cm/°C         Transverse :-50 to 50°C         5.5E-5 cm/cm/°C           Transverse :-50 to 50°C         5.5E-5 cm/cm/°C         Transverse : 100 to 200°C         9.0E-5 cm/cm/°C           Thermal Conductivity         0.27 W/m/K         UL Temperature Rating         130 °C         UL 746B           Electrical         Typical Value Unit         Test method         Surface Resistivity         1.0E+16 ohms         ASTM D257           Volume Resistivity         1.0E+16 ohms cm         ASTM D257         Dielectric Constant         ASTM D150           25°C, 1 KHz         3.80         25°C, 1 KHZ         3.80         25°C, 1 KHZ         3.70           Dissipation Factor         ASTM D150         3.70         ASTM D150         25°C, 1 KHZ         3.0E-3           25°C, 1 KHz         3.0E-3         3.70         25°C, 1 KHZ         3.0E-3         3.70           Dissipation Factor         ASTM D150         3.26°C, 1 KHZ         3				
R-Scale110IhermalTypical Value UnitTest method.Deflection Temperature Under LoadASTM D6481.8 MPa, Unannealed250 °CCLTEASTM E831Flow : -50 to 50°C2.0E-5 cm/cm/°CFlow : 100 to 200°C1.0E-5 cm/cm/°CTransverse : -50 to 50°C5.5E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-15 cm/cm/°CTransverse : 100 to 200°C9.0E-16 ohmsASTM D2571.0E+16 ohmsVolume Resistivity1.0E+16 ohmsSurface Resistivity1.0E+16 ohmsSurface Resistivity1.0E+16 ohmsDielectric ConstantASTM D15025°C, 1 kHz3.8025°C, 1 kHz3.0E-325°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secComparative Tracking Index100 VInsulation Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest method <td></td> <td>86</td> <td></td> <td></td>		86		
Deflection Temperature Under LoadASTM D6481.8 MPa, Unannealed250 °CCLTEASTM E831Flow : -50 to 50°C2.0E-5 cm/cm/°CFlow : 100 to 200°C1.0E-5 cm/cm/°CTransverse : -50 to 50°C5.5E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-5 cm/cm/°CThermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL Temperature Rating130 °CUL Temperature Rating1.0E+16 ohmsSurface Resistivity1.0E+16 ohmsVolume Resistivity1.0E+15 ohms·cmDielectric ConstantASTM D257Dielectric ConstantASTM D15025°C, 1 HHz3.8025°C, 1 HHz3.0E-325°C, 1 HHz3.0E-325°C, 1 HHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance¹ (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityV-0FlammabilityV-0FlammabilityV-0FlammabilityV-0FlammabilityV-0FlammabilityFlam				
Deflection Temperature Under LoadASTM D6481.8 MPa, Unannealed250 °CCLTEASTM E831Flow : -50 to 50°C2.0E-5 cm/cm/°CFlow : 100 to 200°C1.0E-5 cm/cm/°CTransverse : -50 to 50°C5.5E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-5 cm/cm/°CThermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL Temperature Rating130 °CUL Temperature Rating1.0E+16 ohmsSurface Resistivity1.0E+16 ohmsVolume Resistivity1.0E+15 ohms·cmDielectric ConstantASTM D257Dielectric ConstantASTM D15025°C, 1 HHz3.8025°C, 1 HHz3.0E-325°C, 1 HHz3.0E-325°C, 1 HHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance¹ (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityTypical Value UnitFlammabilityV-0FlammabilityV-0FlammabilityV-0FlammabilityV-0FlammabilityV-0FlammabilityFlam	Thermed	Typical Value	Linit	Test pesthed
18 MPa, Unannealed         250 °C           CLTE         ASTM E831           Flow : -50 to 50°C         2.0E-5 cm/cm/°C           Flow : 100 to 200°C         1.0E-5 cm/cm/°C           Transverse : 50 to 50°C         5.5E-5 cm/cm/°C           Transverse : 100 to 200°C         9.0E-5 cm/cm/°C           Transverse : 100 to 200°C         9.0E-5 cm/cm/°C           Thermal Conductivity         0.27 W/m/K           UL Temperature Rating         130 °C         UL 746B           Electrical         Typical Value Unit         Test method           Surface Resistivity         1.0E+16 ohms         ASTM D257           Volume Resistivity         1.0E+15 ohms·cm         ASTM D257           Dielectric Strength         22 kV/mm         ASTM D149           Dielectric Constant         ASTM D150         25°C, 1 kHz           25°C, 1 kHz         3.80         25°C, 1 kHz           25°C, 1 kHz         3.0E-3         25°C, 1 kHz           25°C, 1 kHz         9.0E-3         Arc Resistance           Arc Resistance         124 sec <td< td=""><td></td><td></td><td>Unit</td><td></td></td<>			Unit	
CLTEASTM E831Flow : -50 to 50°C2.0E-5 cm/cm/°CFlow : 100 to 200°C1.0E-5 cm/cm/°CTransverse : -50 to 50°C5.5E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-5 cm/cm/°CThermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL Temperature Rating130 °CUL Temperature Rating1.0E+16 ohmsASTM D257Volume Resistivity1.0E+16 ohmsDielectric Strength22 kV/mmDielectric ConstantASTM D1257Dielectric ConstantASTM D15025°C, 1 kHz3.70Dissipation FactorASTM D15025°C, 1 kHz3.0E-325°C, 1 kHz3.0E-325°C, 1 kHz1.0E +16 ohmsHz1.0E +16Hz1.0E +16Dissipation FactorASTM D15025°C, 1 kHz3.0E-325°C, 1 kHz1.0E +16Dissipation FactorASTM D15025°C, 1 kHz1.0E +16Dissipation Factor1.0E +1625°C, 1 kHz1.0E +13Dissipation Factor1.0E +1325°C, 1 kHz1.0E +325°C, 1 kHz1.0E +325°C, 1 kHz1.0E +13100 VIEC 60112Insulation Resistance 1 (90°C)1.0E +11 ohmsFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest methodFlammabilityV-0UL 94	•	250	°C	A31M D040
Flow : -50 to 50°C         2.0E-5 cm/cm/°C           Flow : 100 to 200°C         1.0E-5 cm/cm/°C           Transverse : -50 to 50°C         5.5E-5 cm/cm/°C           Transverse : 100 to 200°C         9.0E-5 cm/cm/°C           Thermal Conductivity         0.27 W/m/K           UL Temperature Rating         130 °C         UL 746B           Electrical         Typical Value Unit         Test method           Surface Resistivity         1.0E+16 ohms         ASTM D257           Volume Resistivity         1.0E+15 ohms·cm         ASTM D257           Dielectric Strength         22 kV/mm         ASTM D257           Dielectric Constant         ASTM D150         25°C, 1 kHz           25°C, 1 kHz         3.80         25°C, 1 kHz           25°C, 1 kHz         3.0E-3         25°C, 1 kHz           25°C, 1 kHz         1.0E+11 ohms         1.0E+11 ohms           Comparative Tracking Index         1.00 V         IEC 60112           Insulation Resistance ' (90°C)         1.0E+11 ohms		230	C	A CTNA E021
Flow : 100 to 200°C       1.0E-5 cm/cm/°C         Transverse : -50 to 50°C       5.5E-5 cm/cm/°C         Transverse : 100 to 200°C       9.0E-5 cm/cm/°C         Thermal Conductivity       0.27 W/m/K         UL Temperature Rating       130 °C       UL 7468         Electrical       Typical Value Unit       Test method         Surface Resistivity       1.0E+16 ohms       ASTM D257         Volume Resistivity       1.0E+15 ohms-cm       ASTM D257         Dielectric Strength       22 kV/mm       ASTM D149         Dielectric Constant       ASTM D149       ASTM D150         25°C, 1 kHz       3.80       25°C, 1 kHz       3.70         Dissipation Factor       ASTM D150       25°C, 1 kHz       3.0E-3         25°C, 1 kHz       3.0E-3       25°C, 1 kHz       3.0E-3         25°C, 1 kHz       9.0E-3       Arc Resistance       124 sec       ASTM D495         Comparative Tracking Index       100 V       IEC 60112       Insulation Resistance <sup>1</sup> (90°C)       1.0E+11 ohms         Flammability       Typical Value Unit       Test method       Flammability       Test method		2 OF-5	cm/cm/°C	ASTIMILOSI
Transverse : -50 to 50°C5.5E-5 cm/cm/°CTransverse : 100 to 200°C9.0E-5 cm/cm/°CThermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL 746BElectricalTypical Value UnitTest methodSurface Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+15 ohms·cmASTM D257Dielectric Strength22 kV/mmASTM D149Dielectric ConstantASTM D15025°C, 1 kHz3.8025°C, 1 kHz3.0E-325°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest methodFlammabilityTypical Value UnitTest methodFlammabilityV-0UL 94				
Transverse : 100 to 200°C9.0E-5 cm/cm/°CThermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL 746BElectricalTypical Value UnitTest methodSurface Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+15 ohms-cmASTM D257Dielectric Strength22 kV/mmASTM D149Dielectric ConstantASTM D15025°C, 1 KHz3.8025°C, 1 KHz3.70Dissipation FactorASTM D15025°C, 1 KHz3.0E-325°C, 1 KHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitFlame Rating (1.6 mm)V-0UL 94				
Thermal Conductivity0.27 W/m/KUL Temperature Rating130 °CUL 746BElectricalTypical Value UnitTest methodSurface Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+15 ohms·cmASTM D257Dielectric Strength22 kV/mmASTM D149Dielectric ConstantASTM D15025°C, 1 KHz3.8025°C, 1 KHz3.70Dissipation FactorASTM D15025°C, 1 KHz3.0E-325°C, 1 KHz3.0E-325°C, 1 MHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitFlame Rating (1.6 mm)V-0UL 94				
UL Temperature Rating130 °CUL 746BElectricalTypical Value UnitTest methodSurface Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+15 ohms·cmASTM D257Dielectric Strength22 kV/mmASTM D149Dielectric Constant22 kV/mmASTM D15025°C, 1 kHz3.803.8025°C, 1 kHz3.703.70Dissipation FactorASTM D15025°C, 1 kHz3.0E-325°C, 1 kHz3.0E-325°C, 1 kHz100 VIEC 60112Insulation ResistanceInsulation Resistance 1 (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlame Rating (1.6 mm)V-0UL 94				
ElectricalTypical Value UnitTest methodSurface Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+15 ohms·cmASTM D257Dielectric Strength22 kV/mmASTM D149Dielectric Constant22 kV/mmASTM D149Dielectric Constant3.8025°C, 1 kHz25°C, 1 kHz3.703.70Dissipation FactorASTM D15025°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance¹ (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlam Rating (1.6 mm)V-0UL 94				LII 746B
Surface Resistivity1.0E+16 ohmsASTM D257Volume Resistivity1.0E+15 ohms·cmASTM D257Dielectric Strength22 kV/mmASTM D149Dielectric ConstantASTM D14925°C, 1 kHz3.8025°C, 1 kHz3.70Dissipation FactorASTM D15025°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance <sup>1</sup> (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlame Rating (1.6 mm)V-0UL 94		100	0	01/400
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Dielectric Strength22 kV/mmASTM D149Dielectric ConstantASTM D15025°C, 1 kHz3.8025°C, 1 kHz3.70Dissipation FactorASTM D15025°C, 1 kHz3.0E-325°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance¹ (90°C)1.0E+11 ohmsFlame Rating (1.6 mm)V-0UL 94	Surface Resistivity	1.0E+16	ohms	ASTM D257
Dielectric ConstantASTM DI5025°C, 1 kHz3.8025°C, 1 MHz3.70Dissipation FactorASTM DI5025°C, 1 kHz3.0E-325°C, 1 kHz9.0E-3Arc Resistance124 secASTM D495Comparative Tracking Index100 VInsulation Resistance 1 (90°C)1.0E+11 ohmsFlammabilityFlame Rating (1.6 mm)V-0UL 94	Volume Resistivity	1.0E+15	ohms∙cm	ASTM D257
25°C, 1 kHz       3.80         25°C, 1 MHz       3.70         Dissipation Factor       ASTM DI50         25°C, 1 kHz       3.0E-3         25°C, 1 kHz       9.0E-3         Arc Resistance       124 sec         Comparative Tracking Index       100 V         Insulation Resistance <sup>1</sup> (90°C)       1.0E+11 ohms         Flammability       Typical Value Unit       Test method         Flamma Rating (1.6 mm)       V-0       UL 94	Dielectric Strength	22	kV/mm	ASTM D149
25°C, 1 MHz       3.70         Dissipation Factor       ASTM DI50         25°C, 1 kHz       3.0E-3         25°C, 1 MHz       9.0E-3         Arc Resistance       124 sec         Comparative Tracking Index       100 V         Insulation Resistance <sup>1</sup> (90°C)       1.0E+11 ohms         Flammability       Typical Value Unit       Test method         Flame Rating (1.6 mm)       V-0       UL 94	Dielectric Constant			ASTM D150
Dissipation FactorASTM DI5025°C, 1 kHz3.0E-325°C, 1 MHz9.0E-3Arc Resistance124 secArc Resistance100 VIsulation Resistance¹ (90°C)1.0E+11 ohmsFlammabilityFlame Rating (1.6 mm)V-0UL 94	25°C, 1 kHz	3.80		
25°C, 1 kHz       3.0E-3         25°C, 1 MHz       9.0E-3         Arc Resistance       124 sec         Comparative Tracking Index       100 V         Insulation Resistance <sup>1</sup> (90°C)       1.0E+11 ohms         Flammability       Typical Value Unit       Test method         Flame Rating (1.6 mm)       V-0       UL 94	25°C, 1 MHz	3.70		
25°C, 1 MHz         9.0E-3           Arc Resistance         124 sec         ASTM D495           Comparative Tracking Index         100 V         IEC 60112           Insulation Resistance <sup>1</sup> (90°C)         1.0E+11 ohms         Image: Comparative Tracking Index           Flammability         Typical Value Unit         Test method           Flame Rating (1.6 mm)         V-0         UL 94	Dissipation Factor			ASTM D150
Arc Resistance124 secASTM D495Comparative Tracking Index100 VIEC 60112Insulation Resistance 1 (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlame Rating (1.6 mm)V-0UL 94	25°C, 1 kHz	3.0E-3		
Comparative Tracking Index100 VIEC 60112Insulation Resistance 1 (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlame Rating (1.6 mm)V-0UL 94	25°C, 1 MHz	9.0E-3		
Insulation Resistance1 (90°C)1.0E+11 ohmsFlammabilityTypical Value UnitTest methodFlame Rating (1.6 mm)V-0UL 94	Arc Resistance	124	sec	ASTM D495
FlammabilityTypical Value UnitTest methodFlame Rating (1.6 mm)V-0UL 94	Comparative Tracking Index	100	V	IEC 60112
Flame Rating (1.6 mm)         V-0         UL 94	Insulation Resistance <sup>1</sup> (90°C)	1.0E+11	ohms	
Flame Rating (1.6 mm)         V-0         UL 94	Flammability	Typical Value	Unit	Test method
			%	

## Notes

Typical properties: these are not to be construed as specifications. <sup>1</sup> 95%RH, 48 hr

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