

Ryton® 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.

General

| | | |
|------------------------|---------------------------------------|------------------------------------|
| Material Status | • Commercial: Active | |
| Availability | • Asia Pacific • Europe | • Latin America • North America |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight | |
| Features | • Ductile • Good Thermal Stability | • High Impact Resistance |
| Uses | • Industrial Applications | |
| RoHS Compliance | • RoHS Compliant | |
| 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 | MPa | 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 |

Ryton® XE5030BL

polyphenylene sulfide alloy

| Impact | Typical Value | Unit | Test method |
|---|---------------|-------------------|-------------|
| Notched Izod Impact | | | |
| 3.18 mm | 96 | J/m | ASTM D256 |
| -- | 9.5 | kJ/m ² | ISO 180/A |
| Unnotched Izod Impact | | | |
| 3.18 mm | 690 | J/m | ASTM D4812 |
| -- | 45 | kJ/m ² | 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 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 | |
| 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 | 3.80 | | |
| 25°C, 1 MHz | 3.70 | | |
| Dissipation Factor | | | ASTM D150 |
| 25°C, 1 kHz | 3.0E-3 | | |
| 25°C, 1 MHz | 9.0E-3 | | |
| Arc Resistance | 124 | sec | ASTM D495 |
| Comparative Tracking Index | 100 | V | IEC 60112 |
| Insulation Resistance ¹ (90°C) | 1.0E+11 | ohms | |
| Flammability | Typical Value | Unit | Test method |
| Flame Rating (1.6 mm) | V-0 | | UL 94 |
| Oxygen Index | 34 | % | ASTM D2863 |

Notes

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

¹ 95%RH, 48 hr

Ryton® XE5030BL

polyphenylene sulfide alloy



www.syensqo.com

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.

Neither Syensqo nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Syensqo's products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Syensqo's recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva® family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right.

All trademarks and registered trademarks are property of the companies that comprise the Syensqo or their respective owners.

© 2024 2023 Syensqo. All rights reserved.