

LEXAN™ VISUALFX™ RESIN FXD9332T

DESCRIPTION

LEXAN FXD9332T is based on Polycarbonate (PC) copolymer resin. It is a flame-retardant and UV stabilized resin suitable for extrusion. This resin is available in a single translucent color and enables a medium fine surface texture when extruded in sheet, pipe and profiles. This flame retardant resin is EN45545 R4 compliant and is targeted for train lighting cover applications (category R4).

| GENERAL INFORMATION | |
|-----------------------|--|
| Features | Transparent/Translucent, No PFAS intentionally added |
| Fillers | Unreinforced |
| Polymer Types | Polycarbonate (PC) |
| Processing Techniques | Extrusion |

| INDUSTRY | SUB INDUSTRY |
|----------------------------|--------------|
| Electrical and Electronics | Lighting |

TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|----------------|-------------------|----------------|
| MECHANICAL ⁽¹⁾ | | | |
| Tensile Stress, yield, 50 mm/min | 70 | MPa | ISO 527 |
| Tensile Stress, break, 50 mm/min | 55 | MPa | ISO 527 |
| Tensile Strain, yield, 50 mm/min | 6 | % | ISO 527 |
| Tensile Strain, break, 50 mm/min | >50 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 2450 | MPa | ISO 527 |
| Flexural Stress, yield, 2 mm/min | 100 | MPa | ISO 178 |
| Flexural Modulus, 2 mm/min | 2400 | MPa | ISO 178 |
| IMPACT ⁽¹⁾ | | | |
| Izod Impact, unnotched 80*10*3 +23°C | NB | kJ/m ² | ISO 180/1U |
| Izod Impact, unnotched 80*10*3 -30°C | 100 | kJ/m ² | ISO 180/1U |
| Izod Impact, notched 80*10*3 +23°C | 6 | kJ/m ² | ISO 180/1A |
| Izod Impact, notched 80*10*3 -30°C | 5 | kJ/m ² | ISO 180/1A |
| Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm | 5 | kJ/m ² | ISO 179/1eA |
| Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm | 4 | kJ/m ² | ISO 179/1eA |
| Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm | NB | kJ/m ² | ISO 179/1eU |
| Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm | 100 | kJ/m ² | ISO 179/1eU |
| THERMAL ⁽¹⁾ | | | |
| Ball Pressure Test, 125°C +/- 2°C | PASSES | - | IEC 60695-10-2 |
| Vicat Softening Temp, Rate B/50 | 136 | °C | ISO 306 |
| Vicat Softening Temp, Rate B/120 | 137 | °C | ISO 306 |
| HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm | 131 | °C | ISO 75/Be |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 120 | °C | ISO 75/Af |
| PHYSICAL ⁽¹⁾ | | | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------------------------|--------------|
| Mold Shrinkage on Tensile Bar, flow ⁽²⁾ | 0.5 – 0.8 | % | SABIC method |
| Density | 1.25 | g/cm ³ | ISO 1183 |
| Melt Volume Rate, MVR at 300°C/2.16 kg | 7 | cm ³ /10 min | ISO 1133 |
| FLAME CHARACTERISTICS ⁽¹⁾ | | | |
| Oxygen Index (LOI) | 36 | % | ISO 4589 |
| Lateral Flame Spread, CFE | >13 | kW/m ² | ISO 5658-2 |
| Smoke toxicity, CITG (8 min), 50 kW/m ² | < 0.7 | - | ISO 5659-2 |
| EXTRUSION ⁽³⁾ | | | |
| Drying Temperature | 120 | °C | |
| Drying Time | 2 – 4 | Hrs | |
| Barrel - Zone 1 Temperature | 260 – 300 | °C | |
| Barrel - Zone 2 Temperature | 260 – 290 | °C | |
| Barrel - Zone 3 Temperature | 260 – 290 | °C | |
| Adapter Temperature | 100 – 120 | °C | |
| Die Temperature | 240 – 280 | °C | |
| Melt Temperature | 260 – 300 | °C | |

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Processing parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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