

ULTEM™ RESIN SF2250

REGION EUROPE

DESCRIPTION

20% Glass fiber filled, super high flow for thin wall application.

TYPICAL PROPERTY VALUES

Revision 20231212

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|-----------------------------------|-------------------------|--------------|
| MECHANICAL | | | |
| Tensile Stress, brk, Type I, 5 mm/min | 162 | MPa | ASTM D638 |
| Tensile Strain, brk, Type I, 5 mm/min | 3 | % | ASTM D638 |
| Tensile Modulus, 5 mm/min | 8900 | MPa | ASTM D638 |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 197 | MPa | ASTM D790 |
| Flexural Modulus, 1.3 mm/min, 50 mm span | 7260 | MPa | ASTM D790 |
| Tensile Stress, break, 5 mm/min | 157 | MPa | ISO 527 |
| Tensile Strain, break, 5 mm/min | 3 | % | ISO 527 |
| Flexural Modulus, 2 mm/min | 7150 | MPa | ISO 178 |
| IMPACT | | | |
| Izod Impact, notched, 23°C | 89 | J/m | ASTM D256 |
| Izod Impact, notched 80*10*4 +23°C | 9 | kJ/m ² | ISO 180/1A |
| THERMAL | | | |
| HDT, 1.82 MPa, 3.2mm, unannealed | 203 | °C | ASTM D648 |
| CTE, -40°C to 150°C, flow | 1.4E-05 | 1/°C | ASTM E831 |
| CTE, -40°C to 150°C, xflow | 5.4E-05 | 1/°C | ASTM E831 |
| CTE, 23°C to 150°C, flow | 1.8E-05 | 1/°C | ISO 11359-2 |
| CTE, 23°C to 150°C, xflow | 5.9E-05 | 1/°C | ISO 11359-2 |
| HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm | 208 | °C | ISO 75/Ae |
| PHYSICAL | | | |
| Specific Gravity | 1.44 | - | ASTM D792 |
| Moisture absorption (23°C/50% RH) | 0.07 | % | - |
| Mold Shrinkage, flow | 0.46 | % | SABIC method |
| Mold Shrinkage, xflow | 0.54 | % | SABIC method |
| Melt Flow Rate, 337°C/6.6 kgf | 19.7 | g/10 min | ASTM D1238 |
| Density | 1.44 | g/cm ³ | ISO 1183 |
| Water Absorption, (23°C/24hrs) | 0.2 | % | ISO 62-1 |
| Melt Volume Rate, MVR at 345°C/10.0 kg | 40 | cm ³ /10 min | ISO 1133 |
| FLAME CHARACTERISTICS ⁽¹⁾ | | | |
| UL Yellow Card Link | E207780-100116343 | - | - |
| INJECTION MOLDING | | | |
| Drying Temperature | 150 | °C | |
| Drying Time | 4 – 6 | Hrs | |
| Drying Time (Cumulative) | 24 | Hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 350 – 400 | °C | |

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|-----------------------------|----------------|-------|--------------|
| Nozzle Temperature | 345 – 400 | °C | |
| Front - Zone 3 Temperature | 345 – 400 | °C | |
| Middle - Zone 2 Temperature | 340 – 400 | °C | |
| Rear - Zone 1 Temperature | 330 – 400 | °C | |
| Mold Temperature | 135 – 165 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 40 – 70 | rpm | |
| Shot to Cylinder Size | 40 – 60 | % | |
| Vent Depth | 0.025 – 0.076 | mm | |

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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