

## LEXANT™ RESIN HF4010SR

REGION ASIA

### DESCRIPTION

LEXANT™ HF4010SR resin is an excellent flow 42 MFR polycarbonate, MVR of 40. Superior release. High gloss. Suitable for large parts and thin wall molding. Available in opaque colors.

### TYPICAL PROPERTY VALUES

Revision 20230131

| PROPERTIES                                  | TYPICAL VALUES | UNITS                   | TEST METHODS   |
|---------------------------------------------|----------------|-------------------------|----------------|
| <strong>MECHANICAL</strong>                 |                |                         |                |
| Tensile Stress, yield, 50 mm/min            | 63             | MPa                     | ISO 527        |
| Tensile Stress, break, 50 mm/min            | 50             | MPa                     | ISO 527        |
| Tensile Strain, yield, 50 mm/min            | 5.5            | %                       | ISO 527        |
| Tensile Strain, break, 50 mm/min            | 67             | %                       | ISO 527        |
| Tensile Modulus, 1 mm/min                   | 2350           | MPa                     | ISO 527        |
| Flexural Stress, yield, 2 mm/min            | 90             | MPa                     | ISO 178        |
| Flexural Modulus, 2 mm/min                  | 2300           | MPa                     | ISO 178        |
| Ball Indentation Hardness, H358/30          | 130            | MPa                     | ISO 2039-1     |
| <strong>IMPACT</strong>                     |                |                         |                |
| Izod Impact, unnotched 80*10*3 +23°C        | NB             | kJ/m <sup>2</sup>       | ISO 180/1U     |
| Izod Impact, unnotched 80*10*3 -30°C        | NB             | kJ/m <sup>2</sup>       | ISO 180/1U     |
| Izod Impact, notched 80*10*3 +23°C          | 40             | kJ/m <sup>2</sup>       | ISO 180/1A     |
| Izod Impact, notched 80*10*3 -30°C          | 12             | kJ/m <sup>2</sup>       | ISO 180/1A     |
| Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm  | 45             | kJ/m <sup>2</sup>       | ISO 179/1eA    |
| Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm | 13             | kJ/m <sup>2</sup>       | ISO 179/1eA    |
| <strong>THERMAL</strong>                    |                |                         |                |
| CTE, 23°C to 80°C, flow                     | 7.E-05         | 1/°C                    | ISO 11359-2    |
| Ball Pressure Test, 125°C +/- 2°C           | PASSES         | -                       | IEC 60695-10-2 |
| Vicat Softening Temp, Rate A/50             | 144            | °C                      | ISO 306        |
| Vicat Softening Temp, Rate B/50             | 138            | °C                      | ISO 306        |
| HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm     | 134            | °C                      | ISO 75/Be      |
| HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm     | 121            | °C                      | ISO 75/Ae      |
| <strong>PHYSICAL</strong>                   |                |                         |                |
| Melt Flow Rate, 300°C/1.2 kgf               | 42             | g/10 min                | ASTM D1238     |
| Mold Shrinkage on Tensile Bar, flow         | 0.5 – 0.7      | %                       | SABIC method   |
| Density                                     | 1.2            | g/cm <sup>3</sup>       | ISO 1183       |
| Moisture Absorption (23°C / 50% RH)         | 0.11           | %                       | ISO 62         |
| Melt Volume Rate, MVR at 300°C/1.2 kg       | 40             | cm <sup>3</sup> /10 min | ISO 1133       |
| <strong>ELECTRICAL</strong>                 |                |                         |                |
| Volume Resistivity                          | >1.10E+17      | Ω.cm                    | ASTM D257      |
| Surface Resistivity                         | >1.10E+17      | Ω                       | ASTM D257      |
| <strong>INJECTION MOLDING</strong>          |                |                         |                |
| Drying Temperature                          | 120            | °C                      |                |
| Drying Time                                 | 2 – 4          | Hrs                     |                |

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CHEMISTRY THAT MATTERS™



| PROPERTIES                  | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Maximum Moisture Content    | 0.02           | %     |              |
| Melt Temperature            | 280 – 300      | °C    |              |
| Nozzle Temperature          | 270 – 290      | °C    |              |
| Front - Zone 3 Temperature  | 280 – 300      | °C    |              |
| Middle - Zone 2 Temperature | 270 – 290      | °C    |              |
| Rear - Zone 1 Temperature   | 260 – 280      | °C    |              |
| Hopper Temperature          | 60 – 80        | °C    |              |
| Mold Temperature            | 80 – 100       | °C    |              |

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