

LEXANTM RESIN 123M

REGION AMERICAS

DESCRIPTION

Nonhalogenated. 17.5 MFR, for small, intricate parts. UV stabilized. Improved Internal mold release.

TYPICAL PROPERTY VALUES

Revision 20181012

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|--------------------|--------------|
| MECHANICAL | | | |
| Tensile Stress, yld, Type I, 50 mm/min | 63 | MPa | ASTM D 638 |
| Tensile Stress, brk, Type I, 50 mm/min | 66 | MPa | ASTM D 638 |
| Tensile Strain, yld, Type I, 50 mm/min | 7 | % | ASTM D 638 |
| Tensile Strain, brk, Type I, 50 mm/min | 120 | % | ASTM D 638 |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 100 | MPa | ASTM D 790 |
| Flexural Modulus, 1.3 mm/min, 50 mm span | 2350 | MPa | ASTM D 790 |
| IMPACT | | | |
| Izod Impact, unnotched, 23°C | 2140 | J/m | ASTM D 4812 |
| Izod Impact, notched, 23°C | 820 | J/m | ASTM D 256 |
| Izod Impact, notched, -30°C | 200 | J/m | ASTM D 256 |
| Falling Dart Impact (D 3029), 23°C | 169 | J | ASTM D 3029 |
| Instrumented Impact Total Energy, 23°C | 77 | J | ASTM D 3763 |
| THERMAL | | | |
| Vicat Softening Temp, Rate B/50 | 143 | °C | ASTM D 1525 |
| HDT, 0.45 MPa, 3.2 mm, unannealed | 137 | °C | ASTM D 648 |
| HDT, 1.82 MPa, 3.2mm, unannealed | 132 | °C | ASTM D 648 |
| CTE, -40°C to 40°C, flow | 6.36E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 40°C, xflow | 6.5E-05 | 1/°C | ASTM E 831 |
| Specific Heat | 1.26 | J/g-°C | ASTM C 351 |
| Thermal Conductivity | 0.19 | W/m-°C | ASTM C 177 |
| PHYSICAL | | | |
| Specific Gravity | 1.2 | - | ASTM D 792 |
| Specific Volume | 0.83 | cm ³ /g | ASTM D 792 |
| Density | 1.19 | g/cm ³ | ASTM D 792 |
| Water Absorption, 24 hours | 0.15 | % | ASTM D 570 |
| Water Absorption, equilibrium, 23C | 0.35 | % | ASTM D 570 |
| Water Absorption, equilibrium, 100°C | 0.58 | % | ASTM D 570 |
| Mold Shrinkage, flow, 3.2 mm | 0.5 – 0.8 | % | SABIC method |
| Melt Flow Rate, 300°C/1.2 kgf | 17.5 | g/10 min | ASTM D 1238 |
| OPTICAL | | | |
| Light Transmission, 2.54 mm | 88 | % | ASTM D 1003 |
| Haze, 2.54 mm | 1 | % | ASTM D 1003 |
| Refractive Index | 1.586 | - | ASTM D542 |
| INJECTION MOLDING | | | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Drying Temperature | 120 | °C | |
| Drying Time | 3 – 4 | hrs | |
| Drying Time (Cumulative) | 48 | hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 280 – 305 | °C | |
| Nozzle Temperature | 275 – 300 | °C | |
| Front - Zone 3 Temperature | 280 – 305 | °C | |
| Middle - Zone 2 Temperature | 270 – 295 | °C | |
| Rear - Zone 1 Temperature | 260 – 280 | °C | |
| Mold Temperature | 70 – 95 | °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 | |

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.