

## XENOY™ RESIN 1103

REGION AMERICAS

### DESCRIPTION

AUTOMOTIVE, Unreinforced, impact modified PBT+PC alloy. Excellent low temperature impact and chemical resistance. Range gray, black colors.

### TYPICAL PROPERTY VALUES

Revision 20250211

| PROPERTIES                                   | TYPICAL VALUES    | UNITS    | TEST METHODS |
|----------------------------------------------|-------------------|----------|--------------|
| <b>MECHANICAL</b>                            |                   |          |              |
| Tensile Stress, yld, Type I, 50 mm/min       | 51                | MPa      | ASTM D638    |
| Tensile Stress, brk, Type I, 50 mm/min       | 50                | MPa      | ASTM D638    |
| Tensile Strain, yld, Type I, 50 mm/min       | 5                 | %        | ASTM D638    |
| Tensile Strain, brk, Type I, 50 mm/min       | 150               | %        | ASTM D638    |
| Tensile Modulus, 50 mm/min                   | 1890              | MPa      | ASTM D638    |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 77                | MPa      | ASTM D790    |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 1930              | MPa      | ASTM D790    |
| <b>IMPACT</b>                                |                   |          |              |
| Izod Impact, notched, 23°C                   | 747               | J/m      | ASTM D256    |
| Instrumented Dart Impact Total Energy, 23°C  | 61                | J        | ASTM D3763   |
| <b>THERMAL</b>                               |                   |          |              |
| Vicat Softening Temp, Rate B/50              | 125               | °C       | ASTM D1525   |
| HDT, 0.45 MPa, 3.2 mm, unannealed            | 104               | °C       | ASTM D648    |
| HDT, 1.82 MPa, 3.2mm, unannealed             | 87                | °C       | ASTM D648    |
| CTE, -40°C to 40°C, flow                     | 1.71E-04          | 1/°C     | ASTM E831    |
| CTE, -40°C to 40°C, xflow                    | 2.E-04            | 1/°C     | ASTM E831    |
| <b>PHYSICAL</b>                              |                   |          |              |
| Specific Gravity                             | 1.2               | -        | ASTM D792    |
| Mold Shrinkage, flow, 3.2 mm                 | 0.8 – 1           | %        | SABIC method |
| Melt Flow Rate, 250°C/5.0 kgf                | 13                | g/10 min | ASTM D1238   |
| <b>FLAME CHARACTERISTICS</b>                 |                   |          |              |
| UL Yellow Card Link                          | E121562-100149124 | -        | -            |
| <b>INJECTION MOLDING</b>                     |                   |          |              |
| Drying Temperature                           | 110               | °C       |              |
| Drying Time                                  | 4 – 6             | Hrs      |              |
| Drying Time (Cumulative)                     | 8                 | Hrs      |              |
| Maximum Moisture Content                     | 0.02              | %        |              |
| Melt Temperature                             | 255 – 275         | °C       |              |
| Nozzle Temperature                           | 250 – 265         | °C       |              |
| Front - Zone 3 Temperature                   | 250 – 270         | °C       |              |
| Middle - Zone 2 Temperature                  | 245 – 265         | °C       |              |
| Rear - Zone 1 Temperature                    | 240 – 260         | °C       |              |
| Mold Temperature                             | 40 – 90           | °C       |              |
| Back Pressure                                | 0.3 – 0.7         | MPa      |              |
| Screw Speed                                  | 40 – 80           | rpm      |              |

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CHEMISTRY THAT MATTERS™



| PROPERTIES            | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------|----------------|-------|--------------|
| Shot to Cylinder Size | 50 – 80        | %     |              |
| Vent Depth            | 0.013 – 0.02   | mm    |              |

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