

## Technical Data Sheet

**Matrixx 55S7103**

Polycarbonate  
LyondellBasell Industries  
Engineering Plastics

| General                                  |                                     |                        |             |
|------------------------------------------|-------------------------------------|------------------------|-------------|
| Material Status                          | • Commercial: Active                |                        |             |
| Availability                             | • North America                     |                        |             |
| Filler / Reinforcement                   | • Glass Fiber, 10% Filler by Weight |                        |             |
| Additive                                 | • Flame Retardant                   |                        |             |
| Features                                 | • Flame Retardant                   |                        |             |
| Forms                                    | • Pellets                           |                        |             |
| Physical                                 | Nominal Value (English)             | Nominal Value (SI)     | Test Method |
| Density / Specific Gravity               | 1.26                                | 1.26 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 12 g/10 min                         | 12 g/10 min            | ASTM D1238  |
| Mechanical                               | Nominal Value (English)             | Nominal Value (SI)     | Test Method |
| Tensile Strength (Yield)                 | 9000 psi                            | 62.1 MPa               | ASTM D638   |
| Flexural Modulus - Tangent               | 480000 psi                          | 3310 MPa               | ASTM D790   |
| Impact                                   | Nominal Value (English)             | Nominal Value (SI)     | Test Method |
| Notched Izod Impact                      | 2.5 ft·lb/in                        | 130 J/m                | ASTM D256   |
| Thermal                                  | Nominal Value (English)             | Nominal Value (SI)     | Test Method |
| Deflection Temperature Under Load        |                                     |                        | ASTM D648   |
| 66 psi (0.45 MPa), Unannealed            | 285 °F                              | 141 °C                 |             |
| 264 psi (1.8 MPa), Unannealed            | 280 °F                              | 138 °C                 |             |
| RTI Str                                  | 200 °F                              | 93.3 °C                | UL 746B     |
| Flammability                             | Nominal Value (English)             | Nominal Value (SI)     | Test Method |
| Flame Rating                             |                                     |                        | UL 94       |
| 0.06 in (1.5 mm)                         | V-0                                 | V-0                    |             |
| 0.10 in (2.5 mm)                         | 5VA                                 | 5VA                    |             |

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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 250 °F                  | 121 °C             |
| Drying Time            | 4.0 to 6.0 hr           | 4.0 to 6.0 hr      |
| Rear Temperature       | 540 to 590 °F           | 282 to 310 °C      |
| Middle Temperature     | 540 to 590 °F           | 282 to 310 °C      |
| Front Temperature      | 540 to 590 °F           | 282 to 310 °C      |
| Processing (Melt) Temp | 560 to 610 °F           | 293 to 321 °C      |
| Mold Temperature       | 160 to 220 °F           | 71 to 104 °C       |
| Injection Rate         | Slow-Moderate           | Slow-Moderate      |
| Back Pressure          | 50.0 to 100 psi         | 0.345 to 0.689 MPa |
| Cushion                | 0.250 to 0.500 in       | 6.35 to 12.7 mm    |

### Injection Notes

-20°F Dewpoint

### Notes

These are typical property values not to be construed as specification limits.

### Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

### Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

### Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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