

## Technical Data Sheet

**Matrixx 12N7006**

Polypropylene Copolymer  
LyondellBasell Industries  
Engineering Plastics

| General                                           |                         |                         |                          |
|---------------------------------------------------|-------------------------|-------------------------|--------------------------|
| Material Status                                   | • Commercial: Active    |                         |                          |
| Availability                                      | • North America         |                         |                          |
| Additive                                          | • Flame Retardant       |                         |                          |
| Features                                          | • Flame Retardant       | • High Flow             | • High Impact Resistance |
| Physical                                          | Nominal Value (English) | Nominal Value (SI)      | Test Method              |
| Density / Specific Gravity                        | 0.940                   | 0.938 g/cm <sup>3</sup> | ASTM D792                |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)         | 20 g/10 min             | 20 g/10 min             | ASTM D1238               |
| Mechanical                                        | Nominal Value (English) | Nominal Value (SI)      | Test Method              |
| Tensile Strength                                  |                         |                         | ASTM D638                |
| Yield, 73°F (23°C), 0.125 in (3.18 mm)            | 2400 psi                | 16.5 MPa                |                          |
| Tensile Elongation                                |                         |                         | ASTM D638                |
| Yield, 73°F (23°C), 0.125 in (3.18 mm)            | 8.0 %                   | 8.0 %                   |                          |
| Flexural Modulus - Tangent                        |                         |                         | ASTM D790                |
| 73°F (23°C), 0.125 in (3.18 mm)                   | 110000 psi              | 758 MPa                 |                          |
| Impact                                            | Nominal Value (English) | Nominal Value (SI)      | Test Method              |
| Notched Izod Impact                               |                         |                         | ASTM D256                |
| 73°F (23°C), 0.125 in (3.18 mm)                   | No Break                | No Break                |                          |
| Gardner Impact                                    |                         |                         | ASTM D5420               |
| 73°F (23°C), 0.125 in (3.18 mm)                   | 160 in·lb               | 18.1 J                  |                          |
| Thermal                                           | Nominal Value (English) | Nominal Value (SI)      | Test Method              |
| Deflection Temperature Under Load                 |                         |                         | ASTM D648                |
| 66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm) | 175 °F                  | 79.4 °C                 |                          |
| RTI Elec (0.06 in (1.5 mm))                       | 239 °F                  | 115 °C                  | UL 746B                  |
| RTI Imp (0.06 in (1.5 mm))                        | 239 °F                  | 115 °C                  | UL 746B                  |
| RTI Str (0.06 in (1.5 mm))                        | 239 °F                  | 115 °C                  | UL 746B                  |
| Flammability                                      | Nominal Value (English) | Nominal Value (SI)      | Test Method              |
| Flame Rating (0.06 in (1.5 mm))                   | V-2                     | V-2                     | UL 94                    |

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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 180 °F                  | 82 °C              |
| Drying Time            | 4.0 hr                  | 4.0 hr             |
| Rear Temperature       | 350 to 420 °F           | 177 to 216 °C      |
| Middle Temperature     | 350 to 440 °F           | 177 to 227 °C      |
| Front Temperature      | 350 to 440 °F           | 177 to 227 °C      |
| Nozzle Temperature     | 350 to 440 °F           | 177 to 227 °C      |
| Processing (Melt) Temp | 360 to 440 °F           | 182 to 227 °C      |
| Mold Temperature       | 90 to 150 °F            | 32 to 66 °C        |
| Injection Rate         | Slow-Moderate           | Slow-Moderate      |
| Back Pressure          | < 100 psi               | < 0.689 MPa        |
| Cushion                | 0.250 to 0.500 in       | 6.35 to 12.7 mm    |

## 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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