

## Technical Data Sheet

**Network Polymers San 300**

Styrene Acrylonitrile  
LyondellBasell Industries  
Engineering Plastics

**General**

|                   |                      |
|-------------------|----------------------|
| Material Status   | • Commercial: Active |
| Availability      | • North America      |
| Appearance        | • Natural Color      |
| Processing Method | • Injection Molding  |

| Physical                                          | Nominal Value (English) | Nominal Value (SI)     | Test Method             |
|---------------------------------------------------|-------------------------|------------------------|-------------------------|
| Density / Specific Gravity                        | 1.07                    | 1.07 g/cm <sup>3</sup> | ASTM D792               |
| Melt Mass-Flow Rate (MFR) <sup>1</sup>            |                         |                        | ASTM D1238              |
| 200°C/5.0 kg                                      | 8.0 g/10 min            | 8.0 g/10 min           |                         |
| 230°C/3.8 kg                                      | 31 g/10 min             | 31 g/10 min            |                         |
| Mechanical                                        | Nominal Value (English) | Nominal Value (SI)     | Test Method             |
| Tensile Strength <sup>2</sup> (Yield)             | 8600 psi                | 59.3 MPa               | ASTM D638               |
| Flexural Modulus - Tangent <sup>3</sup>           | 460000 psi              | 3170 MPa               | ASTM D790               |
| Impact                                            | Nominal Value (English) | Nominal Value (SI)     | Test Method             |
| Notched Izod Impact                               |                         |                        | ASTM D256               |
| 73°F (23°C), 0.125 in (3.18 mm)                   | 0.40 ft·lb/in           | 21 J/m                 |                         |
| Hardness                                          | Nominal Value (English) | Nominal Value (SI)     | Test Method             |
| Rockwell Hardness (R-Scale)                       | 123                     | 123                    | ASTM D785               |
| Thermal                                           | Nominal Value (English) | Nominal Value (SI)     | Test Method             |
| Deflection Temperature Under Load                 |                         |                        | ASTM D648               |
| 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm) | 206 °F                  | 96.7 °C                |                         |
| Vicat Softening Temperature                       | 212 °F                  | 100 °C                 | ASTM D1525 <sup>4</sup> |

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| Injection              | Nominal Value (English)         | Nominal Value (SI)            |
|------------------------|---------------------------------|-------------------------------|
| Drying Temperature     | 160 to 180 °F                   | 71 to 82 °C                   |
| Drying Time            | 2.0 to 4.0 hr                   | 2.0 to 4.0 hr                 |
| Suggested Shot Size    | 40 to 75 %                      | 40 to 75 %                    |
| Rear Temperature       | 320 to 360 °F                   | 160 to 182 °C                 |
| Middle Temperature     | 360 to 430 °F                   | 182 to 221 °C                 |
| Front Temperature      | 380 to 450 °F                   | 193 to 232 °C                 |
| Nozzle Temperature     | 380 to 450 °F                   | 193 to 232 °C                 |
| Processing (Melt) Temp | 380 to 420 °F                   | 193 to 216 °C                 |
| Mold Temperature       | 80 to 170 °F                    | 27 to 77 °C                   |
| Injection Pressure     | 60.0 to 1100 psi                | 0.414 to 7.58 MPa             |
| Injection Rate         | Moderate-Fast                   | Moderate-Fast                 |
| Back Pressure          | 75.0 to 150 psi                 | 0.517 to 1.03 MPa             |
| Clamp Tonnage          | 2.0 to 3.0 tons/in <sup>2</sup> | 2.8 to 4.1 kN/cm <sup>2</sup> |

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**Notes**

- <sup>1</sup> Procedure A  
<sup>2</sup> 2.0 in/min (51 mm/min)  
<sup>3</sup> 0.050 in/min (1.3 mm/min)  
<sup>4</sup> Loading 1 (10 N)

**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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