

## Technical Data Sheet

### Purell HP671T



Polypropylene, Homopolymer

#### Product Description

Purell HP671T is a nucleated polypropylene homopolymer with a gamma - ray stabilizing additivition for usage in injection molding applications.

Purell HP671T exhibits very high stiffness combined with an excellent transparency.

Purell HP671T is typically used in rigid, high transparency pharmaceutical and diagnostic applications.

All potential activities for applications in the pharmaceutical, medical device, laboratory and diagnostics area have to be discussed with the relevant Technical and Business contacts first. To discuss a medical/pharmaceutical application please contact your local Lyondellbasell reference or your local Distributor.

|                          |                                                                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | Diagnostic Applications; Healthcare Applications; Labware; Medical Devices; Syringes                                                      |
| <b>Market</b>            | Healthcare                                                                                                                                |
| <b>Processing Method</b> | Injection Molding                                                                                                                         |
| <b>Attribute</b>         | Autoclavable; E-Beam Sterilizable; Ethylene Oxide Sterilisation; High Stiffness; Homopolymer; Medium Transparency; Radiation Sterilizable |

| Typical Properties                                                   | Nominal Value | Units             | Test Method   |
|----------------------------------------------------------------------|---------------|-------------------|---------------|
| <b>Physical</b>                                                      |               |                   |               |
| Melt Flow Rate, (230 °C/2.16 kg)                                     | 55            | g/10 min          | ISO 1133-1    |
| Density, (23 °C)                                                     | 0.90          | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Mechanical</b>                                                    |               |                   |               |
| Tensile Modulus                                                      | 1900          | MPa               | ISO 527-1, -2 |
| Tensile Stress at Yield                                              | 39            | MPa               | ISO 527-1, -2 |
| Tensile Strain at Break                                              | 16            | %                 | ISO 527-1, -2 |
| Tensile Strain at Yield                                              | 7.5           | %                 | ISO 527-1, -2 |
| <b>Impact</b>                                                        |               |                   |               |
| Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A) | 2.6           | kJ/m <sup>2</sup> | ISO 179       |
| <b>Hardness</b>                                                      |               |                   |               |
| Ball Indentation Hardness, (H 358/30)                                | 72            | MPa               | ISO 2039-1    |
| <b>Thermal</b>                                                       |               |                   |               |
| Vicat Softening Temperature, (A50)                                   | 155           | °C                | ISO 306       |
| Heat Deflection Temperature B, (0.45 MPa, Unannealed)                | 105           | °C                | ISO 75B-1, -2 |
| <b>Optical</b>                                                       |               |                   |               |
| Haze, (1 mm - injection molded disc)                                 | 18            | %                 | ASTM D1003    |
| Gloss, (45°)                                                         | 125           |                   | ASTM D2457    |