

## Technical Data Sheet : CertyForm P1701 (PL HP570U) Polypropylene, Homopolymer

### Product Description

The polymer grade is a polypropylene homopolymer for usage in injection molding applications. Exhibits a high fluidity combined with a high stiffness. Is extensively applied in 3-part syringes, and closures. Additionally it is used in general injection molding thin-walled warpage-critical 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.

Information regarding regulatory status, including supported, prohibited, or restricted applications, is provided in the **Product Regulatory Summary** and the **Safety Data Sheet (SDS)**.

### General

|                      |                                                                    |
|----------------------|--------------------------------------------------------------------|
| Applications         | Diagnostic Applications; Healthcare Applications; Labware          |
| Market               | Healthcare                                                         |
| Processing Method    | Injection Molding                                                  |
| Attribute            | Autoclavable; Ethylene Oxide Sterilisation; High Flow; Homopolymer |
| Internal ref. number | 1Q029, BEN8882                                                     |
| Revision             | April 2026                                                         |

### Properties.

| Typical Properties                                                   | Nominal Value* | Units             | Test Method   |
|----------------------------------------------------------------------|----------------|-------------------|---------------|
| <b>Physical</b>                                                      |                |                   |               |
| Melt Flow Rate, (230 °C/2.16 kg)                                     | 75             | g/10 min          | ISO 1133-1    |
| Density, (23 °C)                                                     | 0.9            | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Mechanical</b>                                                    |                |                   |               |
| Tensile Modulus                                                      | 1350           | MPa               | ISO 527-1, -2 |
| Tensile Stress at Yield                                              | 32             | MPa               | ISO 527-1, -2 |
| Tensile Strain at Break                                              | >50            | %                 | ISO 527-1, -2 |
| Tensile Strain at Yield                                              | 10             | %                 | ISO 527-1, -2 |
| <b>Impact</b>                                                        |                |                   |               |
| Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A) | 2              | kJ/m <sup>2</sup> | ISO 179       |
| <b>Hardness</b>                                                      |                |                   |               |
| Ball Indentation Hardness, (H 358/30)                                | 62             | MPa               | ISO 2039-1    |
| <b>Thermal</b>                                                       |                |                   |               |
| Vicat Softening Temperature, (A50)                                   | 152            | °C                | ISO 306       |
| Heat Deflection Temperature B, (0.45 MPa, Unannealed)                | 80             | °C                | ISO 75B-1, -2 |

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

### **Processing Techniques**

Users should determine the conditions necessary to obtain optimum product properties and suitability of the product for the intended application.

### **Company Information**

For further information regarding the Velogy, please visit <http://www.velogy.com>

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For further information, please contact [RegulatoryComplianceROP@velogy.com](mailto:RegulatoryComplianceROP@velogy.com)