

## Technical Data Sheet : CertyForm E1440

### High Crystallinity Polypropylene

#### Product Description

The polymer grade is a nucleated polypropylene impact copolymer suitable for use in injection moulding applications. The product exhibits an excellent balance of toughness and high stiffness, combined with a good processability. Typically used in injection moulding applications to produce medical devices components where high mechanical properties are required.

**Detailed information on health and safety, regulatory compliance status, and any supported, prohibited, or restricted applications is available in the Product Regulatory Summary (PRS) and the applicable Safety Data Sheet (SDS).**

#### General

|                           |                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>        | Caps & Closures (Healthcare); Diagnostic Applications; Healthcare Applications; Medical Devices                                                                 |
| <b>Market</b>             | Healthcare                                                                                                                                                      |
| <b>Processing Method</b>  | Injection Molding                                                                                                                                               |
| <b>Attribute</b>          | Antistatic; Autoclavable; Ethylene Oxide Sterilisation; Good Chemical Resistance; Good Processability; High Stiffness; Impact Copolymer; Medium Flow; Nucleated |
| <b>Internal reference</b> | 1Q259, BEN37469                                                                                                                                                 |
| <b>Revision</b>           | Version 2; August 31, 2026                                                                                                                                      |

| Properties                                            | Typical Value | Unit              | Method        |
|-------------------------------------------------------|---------------|-------------------|---------------|
| <b>Polymer properties</b>                             |               |                   |               |
| Density                                               | 0.9           | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Melt Flow Rate (MFR)</b>                           |               |                   |               |
| at 230 °C and 2.16 kg                                 | 18            | g/10 min          | ISO 1133-1    |
| <b>Mechanical properties</b>                          |               |                   |               |
| <b>Charpy Impact Strength</b>                         |               |                   |               |
| at -20 °C, Type 1, Edgewise, Notch A                  | 2.5           | kJ/m <sup>2</sup> | ISO 179       |
| at 0°C, Type 1, Edgewise, Notch A                     | 3             | kJ/m <sup>2</sup> | ISO 179       |
| at 23 °C, Type 1, Edgewise, Notch A                   | 6.5           | kJ/m <sup>2</sup> | ISO 179       |
| <b>Tensile test</b>                                   |               |                   |               |
| Strain at Yield                                       | 5             | %                 | ISO 527-1, -2 |
| Strain at Break                                       | 50            | %                 | ISO 527-1, -2 |
| Stress at Yield                                       | 32            | MPa               | ISO 527-1, -2 |
| Tensile Modulus                                       | 1750          | MPa               | ISO 527-1, -2 |
| <b>Thermal properties</b>                             |               |                   |               |
| Heat Deflection Temperature B, (0.45 MPa, Unannealed) | 100           | °C                | ISO 75-1, -2  |
| <b>Vicat Softening Temperature</b>                    |               |                   |               |
| (A/50)                                                | 153           | °C                | ISO 306       |
| <b>Optical properties</b>                             |               |                   |               |
| <b>Gloss</b>                                          |               |                   |               |
| (60°)                                                 | 70            | %                 | ASTM D2457    |

#### Storage and Handling

The polymer grade is supplied in 25 kg bags, octabins, or bulk containers designed to protect the material from contamination. During storage, the resin should be protected from direct sunlight, temperatures above (<50 °C), and high atmospheric humidity. Prolonged exposure to sunlight, elevated temperatures, or high humidity may accelerate material degradation, reduce storage life, and adversely affect the quality of both the resin and its packaging. If the material is stored under conditions involving significant temperature fluctuations and high humidity, moisture may condense inside the packaging. In such cases, it is recommended to dry the resin before use and to ensure that the material remains completely dry to achieve optimal processing performance. Unfavorable storage conditions may also intensify the resin's slight characteristic odor.

## Technical Data Sheet : CertyForm E1440

### High Crystallinity Polypropylene

#### Processing Techniques

Users should determine the conditions necessary to obtain optimum product properties and suitability of the product for the intended application. In cases where higher temperatures are required, please contact your appropriate technical contact for support.

#### Company Information

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

© Velogy group of companies

#### Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, Velogy may further prohibit or restrict the sale of its products into certain applications.

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

#### Trademarks

The Trademark referenced within the product name is owned or used by the Velogy group of companies