

Technical Data Sheet : CertyForm P1680

Polypropylene, Homopolymer

Product Description

The polymer grade is a nucleated polypropylene homopolymer with a gamma x-ray stabilizing additivition for usage in injection moulding applications. Exhibits very high stiffness combined with an excellent transparency.
Typically used in rigid, high transparency pharmaceutical and diagnostic applications

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

Application	Diagnostic Applications; Healthcare Applications; Labware; Medical Devices; Syringes
Market	Healthcare
Processing Method	Injection Molding
Attribute	Autoclavable; E-Beam Sterilizable; Ethylene Oxide Sterilisation; High Stiffness; Homopolymer; Medium Transparency; Radiation Sterilizable
Internal reference	1Q191, BEN9862
Revision	Version 2.1 : September 7, 2026

Properties	Typical Value	Unit	Method
Polymer properties			
Density, (23 °C)	0.9	g/cm ³	ISO 1183-1
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	55	g/10 min	ISO 1133-1
Mechanical properties			
Charpy Impact Strength			
at 23 °C, Type 1, Edgewise, Notch A	2.6	kJ/m ²	ISO 179
Tensile test			
Strain at Yield	7.5	%	ISO 527-1, -2
Strain at Break	16	%	ISO 527-1, -2
Stress at Yield	39	MPa	ISO 527-1, -2
Tensile Modulus	1900	MPa	ISO 527-1, -2
Thermal properties			
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	105	°C	ISO 75-1, -2
Vicat Softening Temperature			
(A/50)	155	°C	ISO 306
Optical properties			
Haze, (1 mm - injection molded disc)	18	%	ASTM D1003
Gloss			
(45°)	125		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 P1680

Polypropylene, Homopolymer

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

Trademarks

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