Velogy.
Aert van Nesstraat 45,
3012 CA Rotterdam, The Netherlands

Technical Data Sheet : KeyForm L0400

Low Density Polyethylene

Product Description

The grade is a non-additivated, low density polyethylene. It is characterized by a high melt strength leading to a good bubble stability during blown film extrusion. It is delivered in pellet form.

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	Agriculture Film; Bags & Pouches; Heavy Duty Packaging; Liner Film; Shrink Film; Stretch Hood
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	General Purpose; Good Processability; Good Tear Strength; Good Toughness
Internal reference	1Q006, BEN8211
Revision	Version 2 : September 8, 2026

Properties	Typical Value	Unit	Method
Polymer properties			
Density	0.923	g/cm^3	ISO 1183-1
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	0.25	g/10 min (dg/min)	ISO 1133-1
Mechanical properties			
Failure Energy (Film thickness: 70 µm)	6.5	J/mm	DIN 53373
Tensile test			
Tensile Modulus	260	MPa	ISO 527-1, -2
Stress at Yield	10	MPa	ISO 527-1, -2
Thermal properties			
Differential scanning calorimetry (DSC)			
Peak Melting Point	110	°C	ISO 11357-3
Vicat Softening Temperature			
(A/50)	96	°C	ISO 306
Film Properties			
Coefficient of Friction	>0.8		ISO 8295
Dart Drop Impact Strength, F50	250	g	ASTM D1709
Tensile Strain at Break			
MD	200	%	ISO 527-1, -3
TD	500	%	ISO 527-1, -3
Tensile Strength			
MD	27	MPa	ISO 527-1, -3
TD	25	MPa	ISO 527-1, -3
Optical properties			
Haze, (50 µm)	<14	%	ASTM D1003
Gloss			
(20°)	>15		ASTM D2457
(60°)	>50		ASTM D2457
Processing Parameters			
Extrusion Temperature	170-220	°C	
Additional Information			
Test Specimen	Film		
Film properties tested using 50 um thickness blown film extruded at a melt temperature of 180°C and a blow-up ratio of 2.5:1.			

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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.

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
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