

Technical Data Sheet : KeyForm L0401

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. Customers report that films made exhibit a good shrinkage performance and provides the option to produce films with good optical and mechanical properties. It is delivered in pellet form.

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

General

Application	Bags & Pouches; Bottles and Vials; Food Packaging Film; Shrink Film
Market	Flexible Packaging; Rigid Packaging
Processing Method	Blown Film; Extrusion Blow Molding
Attribute	Good Optical Properties; Good Processability; Good Toughness
Internal ref. number	1Q011, BEN8229
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Properties.

		Nominal		Test Method
		Value	Units	
Physical				
Melt Flow Rate, (190 °C/2.16 kg)		0.25	g/10 min	ISO 1133-1
Density		0.927	g/cm ³	ISO 1183-1
Mechanical				
Tensile Modulus		300	MPa	ISO 527-1, -2
Tensile Stress at Yield		13	MPa	ISO 527-1, -2
Environmental Stress Crack Resistance, F ₁₀ (10% Igepal®, Cond B)		15	hr	ASTM D1693
Film				
Dart Drop Impact Strength, F50		180	g	ASTM D1709
Tensile Strength				
MD		30	MPa	ISO 527-1, -3
TD		27	MPa	ISO 527-1, -3
Tensile Strain at Break				
MD		250	%	ISO 527-1, -3
TD		600	%	ISO 527-1, -3
Coefficient of Friction		>0.7		ISO 8295
Impact				
Failure Energy (Film thickness: 70 μm)		5	J/mm	DIN 53373
Thermal				
Vicat Softening Temperature, (A/50)		102	°C	ISO 306
Peak Melting Point		114	°C	ISO 11357-3
Optical				

	Haze, (50 μm)	<7 %	ASTM D1003
Gloss			
	(20°)	>35	ASTM D2457
	(60°)	>90	ASTM D2457
Additional Information			
Test Specimen		Film	
Film properties tested using 50 μm thickness blown film extruded at a melt temperature of 180°C and a blow-up ratio of 2.5:1.			
Processing Parameters			
	Extrusion Temperature	170-220 °C	

*) 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.

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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