

ELTEX® PF0101KE

Product Technical Information

ELTEX® PF0101KE is a metallocene polyethylene plastomer resin produced in Europe.

Benefits & Features

ELTEX® PF0101KE is a polyethylene copolymer containing hexene-1 as comonomer and produced with a metallocene catalyst. It offers the following properties:

- Extremely low sealing initiation temperature and excellent Hot Tack strength
- Unrivalled impact strength and puncture resistance
- Very high gloss and transparency
- Good bubble stability and easy extrudability
- Excellent blending compatibility with other LLDPE and LDPE grades

Applications

ELTEX® PF0101KE has been developed for use in highly technical film like food packaging, lamination and co-extrusion applications where superior mechanical and sealing performance is required. ELTEX® PF0101KE can be used pure or as a blending partner with other polyolefins. In addition, ELTEX® PF0101KE offers easy extrudability.

ELTEX® PF0101KE is formulated with slip and antiblocking agents that offer high slip with easy opening properties. The use of additional antiblocking agents might be required depending on the film structure and thickness. Addition of other polymers, masterbatches and pigments may alter film slip and antiblock performance.

We recommend that you consult your INEOS technical representative for further advice on the use of ELTEX® PF0101KE.

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	1.3	g/10min
Physical				
Density ISO 17855-1	23°C	ISO 1183-2	903	kg/m ³
Mechanical*				
Dart drop impact Method A		ASTM D 1709	1000	g
Tensile strength at Yield MD/TD		ISO 527-3	6 / 6	MPa
Tensile strength at break MD/TD		ISO 527-3	43 / 52	MPa
Tensile strain at break MD/TD		ISO 527-3	420 / 530	%
1% Secant modulus MD/TD		ISO 527-3	80 / 80	MPa
Elmendorf tear strength MD/TD		ASTM D 1922	130 / 190	g/25 µm
Optical*				
Haze	25µm	ASTM D 1003	8	%
Gloss	45°	ASTM D 2457	62	%
Thermal				
Peaks melting temperature (DSC)		INEOS Test Method	86 – 114	°C
Vicat Softening temperature	10N	ISO306/A50	81	°C



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Additives

Slip (erucamide)	INEOS Test Method	1200	ppm
Antiblock (silica)	INEOS Test Method	2500	ppm
Other additives: antioxidants and PPA			

Data should not be used for specification work

* 25 µm film, 2.5:1 blow-up ratio, 210°C melt temperature, die gap 1,2 mm - MD = machine direction, TD = transverse direction

Processing guidelines

ELTEX® PF0101KE in lean blends can be processed on most standard extrusion equipment. Optimisation of conditions may be necessary, depending on the exact blend used.

ELTEX® PF0101KE rich film formulations are often processed on modified LDPE machinery, but for the best performance the use of purposely designed LLDPE machinery is recommended. Particular attention should be paid to maintaining a low melt temperature, and an efficient bubble cooling system should be employed. The recommended melt temperature range is 190 - 230°C.

Storage

The product should be stored in a dry and dust free environment at temperature below 50°C. Exposure to direct sunlight should be avoided as this may lead to product deterioration. It is advised to process the product within maximum one year after delivery.

Regulatory Information

The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website www.ineos.com where a specific Regulatory Certificate is available for each grade under the heading "SDS & Regulatory Certificate".

Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical sectors.

Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website www.ineos.com. Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

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