



Eltex[®] PF6612KE

Product Technical Information

Eltex[®] PF6612KE is a metallocene LLDPE grade produced in Europe.

Benefits & Features

Eltex[®] PF6612KE is a polyethylene copolymer containing hexene-1 as the comonomer produced with a metallocene catalyst. It offers the following properties:

- High impact strength and rigidity
- Excellent optical properties
- Very good bubble stability and extrudability, even at low gauge and narrow die gap
- Low temperature sealing characteristics

Eltex[®] PF6612KE is formulated with antioxidants, slip and antiblocking agents, and a processing aid. Addition of other polymers, masterbatch and pigments may alter film slip and antiblock performance

Applications

Eltex[®] PF6612KE has been developed for use in collation shrinkwrap, food packaging, refuse sacks and other thin film applications where an excellent balance between film strength and rigidity is required together with good optical properties. In addition, Eltex[®] PF6612KE offers easy extrudability.

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	1.3	g/10min
Physical				
Density ISO 1872-1	23°C	ISO 1183-2	927	kg/m ³
Mechanical*				
Dart drop impact	Method A	ASTM D 1709	200	g
Tensile strength at Yield	MD/TD**	ISO 527-3	13 / 13	MPa
Tensile strength at break	MD/TD**	ISO 527-3	55 / 50	MPa
Tensile strain at break	MD/TD**	ISO 527-3	570 / 690	%
1% Secant modulus	MD/TD**	ISO 527-3	230 / 270	MPa
Elmendorf tear strength	MD/TD**	ASTM D 1922	160 / 560	g/25 µm
Coefficient of friction		ASTM D 1894	<0.3	-
Optical*				
Haze		ASTM D 1003	7	%
Gloss	45°	ASTM D 2457	65	%
Thermal				
Peak DSC melting temperature	2nd heating	ASTM D 3418	120	°C
Additives				
Slip (erucamide)		INEOS Method	1000	ppm
Antiblock (silica)		INEOS Method	300	ppm
Antioxidants and PPA				

Data should not be used for specification work

* 25 µm film 2.5:1 blow-up ratio, 220°C melt temperature - ** MD = machine direction, TD = transverse direction

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Processing guidelines

Eltex[®] PF6612KE in lean blends can be processed on most standard extrusion equipment. Optimisation of conditions may be necessary, depending on the exact blend used.

Eltex[®] PF6612KE 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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