Eltex® PF6212AE

Product Technical Information

Eltex® PF6212AE is a metallocene LLDPE grade produced in Europe

Benefits & Features

Eltex® PF6212AE is a polyethylene copolymer containing hexene-1 as the comonomer produced with a metallocene catalyst. It offers the following properties:

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

Eltex® PF6212AE is formulated with antioxidants and a polymer processing aid.

Applications

Eltex® PF6212AE has been developed for use in food packaging and other thin film applications where excellent mechanical and optical performance is required. **Eltex® PF6212AE** offers easy extrudability.

We recommend that you consult your INEOS technical representative for further advice on the use of **Eltex® PF6212AE**

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	1.3	g/10 min
Physical				
Density ISO 1872-1	23°C	ISO 1183-1	919	kg/m³
Mechanical*				
Dart drop impact	Method A	ASTM D 1709	> 1000	g
Tensile Stress at Yield	MD/TD**	ISO 1184	9/10	MPa
Tensile Stress at Break	MD/TD**	ISO 1184	65/60	MPa
Elongation at Break	MD/TD**	ISO 1184	550/670	%
1% Secant modulus	MD/TD**	ISO 1184	180/200	MPa
Elmendorf tear strength	MD/TD**	ASTM D 1922	200/440	g/25 µm
Optical*				
Haze		ASTM D 1003	7	%
Gloss	45°	ASTM D 2457	65	‰
Thermal				
Peaks DSC melting temperature	2nd heating	ASTM D 3418	105 - 118	°C
Additives				
Antioxidants and PPA				

Data should not be used for specification work

* 25 µm film 2.5:1 blow-up ratio, 200°C melt temperature - ** MD = machine direction, TD = transverse direction

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Processing guidelines

Eltex® PF6212AE in lean blends can be processed on most standard extrusion equipment. Optimisation of conditions may be necessary, depending on the exact blend used.
Eltex® PF6212AE 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.