



Polyethylene FS1470

High density Polyethylene for Film Extrusion

Description

FS1470 is a high density polyethylene film grade which combine excellent extrusion behaviour with superior mechanical properties.

Films made of FS1470 have high impact and tensile strength, and balanced tear properties.

Applications

FS1470 has been developed especially for applications like:

Heavy-duty sack
Refuse sacks and liners

Carrier-bag film

Additives

FS1470 contains antioxidant.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	947 kg/m ³	ISO 1183
Melt Flow Rate (190 °C/5,0 kg)	0,2 g/10min	ISO 1133
Melt Flow Rate (190 °C/21,6 kg)	6 g/10min	ISO 1133
Melting temperature	130 °C	ISO 11357-3
Vicat softening temperature	124 °C	ISO 306

Film Properties

Film properties are strongly dependent of extrusion conditions.

Property	Typical Value	Test Method
Data should not be used for specification work		
Dart Drop	350 g	ISO 7765-1
Puncture resistance	Energy to break Force	ASTM D 5748
	1,5 J	
	45 N	
Tensile Strain at Break ¹	MD 250 %	ISO 527-3
Tensile Strain at Break	TD 300 %	ISO 527-3
Tensile Strength	MD 50 MPa	ISO 527-3
Tensile Strength	TD 55 MPa	ISO 527-3
Tensile Modulus	MD 1.000 MPa	ASTM D 882-A
Tensile Modulus	TD 1.100 MPa	ASTM D 882-A
Tear resistance (Elmendorf)	MD 0,2 N	ISO 6383/2
	TD 0,3 N	

¹ MD = machine direction, TD = transverse direction.



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Processing Techniques

FS1470 is easily processed on conventional extruders.

FS1740 is intended for high neck extrusion on HDPE film extruders. The material will provide optimal performance in extrusion and in mechanical properties.

Recommended extrusion conditions are:

Flat temperature profile with a melt temperature between 210°C and 230°C.

Neck height: 5 - 8 x die diameter

Blow up ratio: 3:1 - 5:1

Storage

FS1470 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety

The product is not classified as a dangerous preparation.

Please see our Safety Data Sheet for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borealis representative.

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

Related Documents

Most Data sheet and safety data sheets are available on Borealis web site www.borealisgroup.com. If the data sheets not could be found on the web, Borealis contact person could supply with information.



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The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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