

Polyethylene FT5230

Low density polyethylene for Film Extrusion

Description

FT5230 is a Low Density Polyethylene for Film Extrusion. Tubular Technology. Unmodified.

This grade is developed for the production of packaging film with good optical properties for medium duty film applications.

Applications

FT5230 has been developed especially for applications like:

Shrink film
Carrier-bag film
Pouches

Lamination films
Food packaging

Additives

FT5230 contains no additives.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	923 kg/m ³	ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	0,75 g/10min	ISO 1133
Melting temperature (DSC)	112 °C	ISO 11357-3

Film Properties

Film properties are measured on 40 µm film sample produced on a 60 mm W&H extruder with IBC cooling at BUR = 1:2,5.

Property	Typical Value	Test Method
Data should not be used for specification work		
Dart Drop	120 g	ISO 7765-1
Instrumented puncture test	Total Penetration Energy	2,5 J
Haze	8 %	ISO 6603-2
Gloss at 20 degree (of arc)	85	ASTM D 1003
Tensile Strain at Break ¹	MD 250 %	ASTM D 2457
Tensile Strain at Break	TD 550 %	ISO 527-3
Tensile Strength	MD 27 MPa	ISO 527-3
Tensile Strength	TD 24 MPa	ISO 527-3
Tensile Modulus	MD 230 MPa	ISO 527-3
Tensile Modulus	TD 260 MPa	ASTM D 882-A
Tear resistance (Elmendorf)	MD 4 N	ASTM D 882-A
	TD 2 N	ISO 6383/2
Coefficient of friction (Dynamic)	0,8	ISO 8295

¹ MD = machine direction, TD = transverse direction.

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Processing Techniques

FT5230 is easily processed on conventional extruders.

Recommended melt temperature range is from 160°C to 190°C.

With suitable equipment FT5230 can be drawn down to 25 - 30 micron.

Due to differences in screw and die head designs the optimum temperature adjustments are individual and should be sought for each production line

Storage

FT5230 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 dangerous.

Please see our "Safety data sheet" / "Product safety information 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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