

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.

**CAS-No.** 9002-88-4

# **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/m³	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	ISO 6603-2	
Haze .	0,	8 %	ASTM D 1003	
Gloss at 20 degree (of arc)		85	ASTM D 2457	
Tensile Strain at Break 1	MD	250 %	ISO 527-3	
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	ASTM D 882-A	
Tensile Modulus	TD	260 MPa	ASTM D 882-A	
Tear resistance (Elmendorf)	MD	4 N	ISO 6383/2	
,	TD	2 N		

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Coefficient of friction (Dynamic)

0.8

ISO 8295

### **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 could not be found on the web, Borealis contact person could supply with information.

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<sup>&</sup>lt;sup>1</sup> MD = machine direction, TD = transverse direction.



#### **Disclaimer**

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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