



# Polyethylene FT5236

Low Density Polyethylene

## Description

**FT5236** is a low density polyethylene based on the tubular technology for film extrusion, containing anti-block and slip additives. 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

**FT5236** is intended for:

Carrier-bag film  
Pouches

Lamination films  
Food packaging

## Additives

	Content	
Antiblock (Synthetic Silica)	800 ppm	Borealis Method
Slip (Erucamide)	550 ppm	Borealis Method
Antioxidant	Yes	Borealis Method

## Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	923 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	0,75 g/10min	ISO 1133
Melting temperature	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	8 %	ASTM D 1003
Gloss at 20 degree (of arc)	85	ASTM D 2457
Tensile Strain at Break <sup>1</sup>	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	
Coefficient of friction (Dynamic)	0,2	ISO 8295

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

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## Processing Techniques

**FT5236** is easily processed on conventional extruders.  
Recommended melt temperature range is from 160°C to 190°C.

With suitable equipment FT5236 can be drawn down to 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

**FT5236** 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.

More information on storage is found in our "Safety data sheet" / "Product safety information sheet".

## 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

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

"Safety data sheet" / "Product safety information sheet"

Statement on chemicals, regulations and standards

Statement on Origin of Raw Materials

General statement on compliance to food contact regulations



**Polyethylene**  
**FT5236**

**Issuer:**

Marketing Consumer Products / Mari Kylmala  
Product Management / Jenny Wang

**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.**

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

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**It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.**

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