



Polyethylene FA5224

Low density polyethylene for Film Extrusion

Description

FA5224 is a Low Density Polyethylene for Film Extrusion. Autoclave Technology. Contains Antioxidant, Anti-block and Medium Slip additives.

This grade is developed to give strong film for medium duty applications.

Applications

FA5224 has been developed especially for applications like:

Carrier-bag film
Pouches

General packaging film

Additives

	Content	
Antiblock (Talc)	850 ppm	Borealis Method
Slip (Erucamide)	450 ppm	Borealis Method
Antioxidant	Yes	Borealis Method

Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density	922 kg/m ³	ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	1,2 g/10min	ISO 1133
Melting temperature	110 °C	ISO 11357-3
Vicat softening temperature	96 °C	ISO 306

Film Properties

Film properties are measured on 40µm 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	140 g	ISO 7765-1
Puncture resistance	Energy to break 2 J	ASTM D 5748
	Force 53 N	
Haze	8 %	ASTM D 1003
Gloss	85	ASTM D 2457
Tensile Strain at Break ¹	MD 300 %	ISO 527-3
Tensile Strain at Break	TD 500 %	ISO 527-3
Tensile Strength	MD 26 MPa	ISO 527-3
Tensile Strength	TD 23 MPa	ISO 527-3
Tensile Modulus	MD 180 MPa	ASTM D 882-A



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Tensile Modulus	TD	180 MPa	ASTM D 882-A
Tear resistance (Elmendorf)	MD	4 N	ISO 6383/2
	TD	2 N	
Coefficient of friction (Dynamic)		0,15	ISO 8295

¹ MD = machine direction, TD = transverse direction.

Processing Techniques

FA5224 is easily processed on conventional extruders.

With suitable equipment FA5224 can be drawn down to 25-30 micron.

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

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

Storage

FA5224 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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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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