

Low density polyethylene for Film Extrusion

# **Description**

FA7229 is a Low Density Polyethylene for Film Extrusion. Autoclave Technology. Includes Antioxidant and Cling additive.

This grade is developed for production of blown cling film.

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

# **Applications**

FA7229 has been developed especially for applications like:

Food wrap film Blending Lamination films

#### **Additives**

FA7229 contains antioxidant and antifog/cling additives.

# **Physical Properties**

Property	Typical Value Test Method  Data should not be used for specification work	
Density Melt Flow Rate (190 °C/2,16 kg) Melting temperature	922 kg/m³ 4,0 g/10min 111 °C	ISO 1183 ISO 1133 ISO 11357-3

### **Film Properties**

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

Property	<b>Typical Value</b> Data should not be used for specific		Test Method specification work		
Dart Drop		80 g	ISO 7765-1		
Haze		6 %	ASTM D 1003		
Gloss		110	ASTM D 2457		
Tensile Strain at Break 1	MD	400 %	ISO 527-3		
Tensile Strain at Break	TD	650 %	ISO 527-3		
Tensile Strength	MD	24 MPa	ISO 527-3		
Tensile Strength	TD	18 MPa	ISO 527-3		
Tensile Modulus	MD	200 MPa	ASTM D 882-A		
Tensile Modulus	TD	180 MPa	ASTM D 882-A		
Tear resistance (Elmendorf)	MD	3 N	ISO 6383/2		
,	TD	2 N			

 $<sup>^{1}</sup>$  MD = machine direction, TD = transverse direction.





# **Processing Techniques**

FA7229 is easily processed on conventional extruders.

Recommended melt temperature range is from 140°C to 180°C.

To obtain high clarity and good cling properties, a melt temperature of 180°C would be preferred. Due to differences in screw and die head designs the optimum temperature adjustments are individual and should be sought for each production line. Migration speed of the cling additive is a function of the web tension in the fil roll. The web tension should not exceed 1,5% for a 25 micron or thinner film.

With suitable equipment FA7229 can be drawn down to 15-20 micron.

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#### **Storage**

**FA7229** 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**

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 polymer additives and BSE Statement on compliance to food contact regulations

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