

## Polyethylene

# FA3227

### Low Density Polyethylene

#### Description

FA3227 is a low density polyethylene based on the autoclave technology for film extrusion.

Cas No. 9002-88-4

FA3227 contains:

Yes UV stabiliser

#### Typical characteristics

FA3227 can be described with following typical characteristics:

Bubble stability Excellent shrink properties  
Easy to extrude

#### Applications

FA3227 is intended for following applications:

Heavy-duty sacks Shrink film  
Liners Construction film

#### Physical properties

Property	Typical value *	Unit	Test method
Density	922	kg/m <sup>3</sup>	ISO 1183-1
Melt flow rate (190 °C/2.16 kg)	0.3	g/10min	ISO 1133-1
Vicat softening temperature A50 (10 N)	92	°C	ISO 306
Melting temperature	110	°C	ISO 11357-3

\* Data should not be used for specification work

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### Film properties

Property	Typical value *	Unit	Test method
Dart drop	450	g	ISO 7765-1
Tear resistance - Elmendorf <sup>1</sup>	5	N	ISO 6383-2
Tear resistance - Elmendorf <sup>2</sup>	6	N	ISO 6383-2
Tensile strength <sup>1</sup>	25	MPa	ISO 527-3
Tensile strength <sup>2</sup>	23	MPa	ISO 527-3
Tensile strain at break <sup>1</sup>	400	%	ISO 527-3
Tensile strain at break <sup>2</sup>	600	%	ISO 527-3
Tensile modulus <sup>1</sup>	190	MPa	ASTM D882
Tensile modulus <sup>2</sup>	190	MPa	ASTM D882
Gloss 45°	55	GU	ASTM D2457
Haze	14	%	ASTM D1003
Coefficient of friction (film/film)	0.6	-	ISO 8295

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<sup>1</sup> Machine direction

<sup>2</sup> Transverse direction

### Processing techniques

FA3227 is easily processed on conventional extruders.

With suitable equipment FA3227 can be drawn down to 70-75 micron.

Recommended melt temperature range is from 170°C to 200°C.

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

### Packaging and storage

FA3227 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

### Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website [www.borealisgroup.com](http://www.borealisgroup.com).

### Sustainability aspects

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