

# Borealis PE FG5190

## Linear Low Density Polyethylene

### Borealis AG



#### Product Description

FG5190 is a Butene Linear Low Density Polyethylene for Film Extrusion. Includes Antioxidant.

The grade is developed for medium and heavy duty bags, bags and bin liners, dual stretch films, and film applications demanding high puncture resistance and strength. In mixtures with LD, the grade contribute to improve the draw down, seal strength and avoids bum through problems in shrinkfilm.

#### General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Antioxidant		
Features	• Antioxidant • Butene Comonomer	• Good Drawdown • High Strength	• Puncture Resistant
Uses	• Film • Heavy-duty Bags	• Liners • Shrink Wrap	• Stretch Wrap
Forms	• Pellets		
Processing Method	• Film Extrusion		

#### Physical

	Nominal Value Unit	Test Method
Density	0.919 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.2 g/10 min	ISO 1133

#### Mechanical

	Nominal Value Unit	Test Method
Coefficient of Friction vs. Itself - Dynamic	0.80	ISO 8295

#### Films

	Nominal Value Unit	Test Method
Film Thickness - Tested	40 µm	
Secant Modulus		ASTM D882A
MD: 40 µm	170 MPa	
TD: 40 µm	210 MPa	
Tensile Stress		ISO 527-3
MD: Yield, 40 µm	12.0 MPa	
TD: Yield, 40 µm	12.0 MPa	
MD: 40 µm	39.0 MPa	
TD: 40 µm	34.0 MPa	
Tensile Elongation		ISO 527-3
MD: Break, 40 µm	740 %	
TD: Break, 40 µm	850 %	
Dart Drop Impact (40 µm)	140 g	ISO 7765-1
Elmendorf Tear Strength		ISO 6383-2
MD: 40 µm	1.0 N	
TD: 40 µm	6.5 N	

#### Optical

	Nominal Value Unit	Test Method
Gloss (20°, 40.0 µm)	95	ASTM D2457
Haze (40.0 µm)	12 %	ASTM D1003

#### Extrusion

	Nominal Value Unit
Melt Temperature	235 °C

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.