INSPIRE™ 136

Sub-group:
Performance Polymer

Description:
Braskem INSPIRE™ 136 Performance Polymer is a low gel resin developed for the manufacturing of films for quality applications.
Braskem INSPIRE™ 136 Performance Polymer combines good processability with good stiffness and low gel content. It can be used as a blend partner to make more effective films with blown or cast film technology.

Application:
- food packaging
- hygiene applications

Process:
Blown and cast film extrusion

Regulatory Information:
Braskem INSPIRE™ 136 Performance Polymer complies with:
- European Commission Regulation (EU) No 10/2011
- U.S. FDA FCN 843

The appropriate regulations should be consulted for more detailed information

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.900 g/cm3	0.900 g/cm3	ISO 1183
Melt Mass-Flow Rate (230°C/2.16 kg)	3.5 g/10 min	3.5 g/10 min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Flexural Modulus (Injection Molded)	167000 psi	1150 MPa	ISO 178

Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2.0 mil	50 µm	
Film Puncture Energy (2.0 mil (50µm))	26.6 in.lb	3 J	ASTM D 5748
Film Puncture Force (2.0 mil (50µm))	15.7 in.lb	70 J	ASTM D 5748
Tensile Modulus			ISO 527-3
2% Secant, MD: 2.0 mil (50µm), Blown Film	98600 psi	680 MPa	
2% Secant, MD: 2.0 mil (50µm), Blown Film	94300 psi	650 MPa	

Tensile Stress			ISO 527-3
MD: Yield, 2.0 mil (50µm),Blown Film	3920 psi	27 MPa	
TD: Yield, 2.0 mil (50µm),),Blown Film	3340 psi	23 MPa	
MD: Yield, 2.0 mil (50µm),),Blown Film	5080 psi	35 MPa	
TD: Yield, 2.0 mil (50µm),),Blown Film	4350 psi	30 MPa	
Tensile Elongation			ISO 527-3
MD: Break, 2.0 mil (50µm)	610 %	610 %	
TD: Break, 2.0 mil (50µm))	650 %	650 %	
Dart Drop Impact (2.0 mil(50µm))	170 g	170 g	ISO 7765-/A
Elemendorf Tear Strength			ISO 527-3
MD: Break, 2.0 mil (50µm), Blown Film	27 g	27 g	
TD: Break, 2.0 mil (50µm), Blown Film	50 g	50 g	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	190 °F	88 °C	
Vicat Softening Temperature	304 °F	151 °C	ISO 306/A

Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	446 °F	230 °F	

Extrusion Notes
Fabrication Conditions for blown film: Die gap: 1.0mm, Melt Temperature:230 °C, Blow-up Ratio: 2.5:1

Notes
These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

* Injection Molded

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Additional Information:

E-mail: europe.polypropylene@braskem.com

This document is intended for use within Europe, published: 10th Jan 2012