

## Linear Low Density Polyethylene PLURIS4303

### Description:

Pluris4303 is a Braskem Quaterpolymer produced with Spherilene technology. This grade shows unique properties, such as high stiffness associated with toughness. In addition to good processability, also shows a very good bubble stability and very low gel content.

### Applications:

Thin films and automatic packaging which require higher stiffness: textile products, toilet paper and others.

### Additive:

Antiblocking medium

Slip medium

### Process:

Blown Film Extrusion

### Control Properties:

	ASTM Method	Unit	Value
Melt Flow Rate (190/2.16)	D 1238	g/10 min	1.8
Density	D 792	g/cm <sup>3</sup>	0.922

### Properties:

Blown Film Properties<sup>a</sup>

	ASTM Method	Unit	Value
Tensile Strength at Break (MD/TD)	D 882	MPa	30/20
Elongation at Break (MD/TD)	D 882	%	700/1270
Flexural Modulus – 1% Secant (MD/TD)	D 882	MPa	240/300
Elmendorf Tear Strength (MD/TD)	D 1922	gF	30/1070
Haze	D 1003	%	15
Gloss - Angle 60°	D 2457	%	57

(a) 40 µm thickness film, processed in a 40mm screw diameter extruder with blow up ratio of 2.2:1. (MD: Machine Direction; TD: Transversal Direction).

### Recommended Processing Conditions:

#### Blown Film Extrusion

- Temperature profile: 170 to 180°C
- Temperature profile in the die: 190 to 200°C
- Blow up ratio: 2 to 3:1
- Die gap: 1.8 to 2.5mm
- Mass temperature: 190° to 200°C
- It's recommended to add 20 – 30% LDPE to have excellent optical properties.

