Linear Low Density Polyethylene PLURIS4303

Description:
Pluris4303 is a Braskem Quaterpolymer produced with Spherilene technology. This grade show 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/cm3	0.922

Properties:
Blown Film Properties[a]

	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 60º	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.

Final Remarks:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – Food and Drug Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA.
2. These information reflect typical values obtained in our laboratories, but should not be considered as absolute or as warranted values. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product.
3. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
4. In case of doubt regarding utilization, or for other applications, please contact our Technical Assistance.
5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. CAS Registry number: 60785-11-7 + 9002-88-4.
6. The mentioned values in this report can be changed at any moment without Braskem previous communication.
7. Braskem does not recommend this grade for packages, parts or any kind of product manufacture that will be used for storage or contact with solution that will have internal contact with human body.
8. Braskem polyolefin products do not have additives with metals or other substances on purpose of oxi-degradation. These additives and the decomposition and disintegration of polyolefins caused by oxi-degradation phenomenon can cause environmental pollution, decrease the package performance and increase migration of package constituent to food, compromising resin approval regarding the requirements of Anvisa Resolution 105/99. The use of these additives with Braskem polyolefin products implies immediate loss of performance guarantee described in this data sheet.
9. The content of this Data Sheet replaces previous revisions published for this product.
10. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.