

Linear Low Density Polyethylene FG31

Description:

FG31 is a Linear Low Density Polyethylene. Developed for blown film extrusion in blends with polyethylenes. Films obtained with this product show excellent mechanical properties. It contains antioxidant additives.

Applications:

Stretch films; heavy-duty bags; liners; LDPE and HDPE blends and packages for general use.

Process:

FG31 resin can be processed with polyethylenes on conventional extruders with a maximum ratio of 30%. The best results are obtained with polyethylene resins of low melt index. The recommended temperature profile for blends with LDPE is slightly higher than those ones for the conventional LDPE (10 to 20°C).

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/2.160)	D 1238	g/10 min	1.00
Density	D 792	g/cm ³	0.919

Typical Properties:

Blown Film Properties^a

	ASTM Method	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	40/30
Elongation at Break (MD/TD)	D 882	%	930/1280
Tensile Modulus – 1% Secant	D 882	MPa	160/180
Dart Drop Impact	D 1709	g/F50	80
Elmendorf Tear Strength (MD/TD)	D 1922	gF	120/400
Haze	D 1003	%	11
Gloss - Angle 60°	D 2457	%	107

(a) 25 µm thickness film, processed in a 40 mm screw diameter extruder with blow up ratio of 2,2:1 (MD = Machine Direction; TD = Transversal Direction)

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. The information presented in this Data Sheet reflects 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: 25087-34-7.
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. The content of this Data Sheet replaces previous revisions published for this product.
9. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.