

Low Density Polyethylene STN7006

Description:

STN7006 is a low-density polyethylene (LDPE) specially developed for coextruded films and lamination. The resin presents a great combination among mechanical, optical and stiffness properties. Besides STN7006 has low gels content which ensure a production of excellent appearance films. This product is identified as PE 114 according to ASTM D-4976-04a standard specification. Additives free.

The minimum biobased content of this grade is 95%, determined according to ASTM D6866.

Applications:

High clarity films for coextruded food packaging, such as: cheese, meat, sausages, sliced ham, etc.
Cast films for table cloth, curtains and laminated tissues.
Flexible bottles for solids, liquids or pasties products for hygiene and cleanness.
Flexible containers for cosmetics and pharmaceutical applications (complies with USP 37).

Process:

Blown Film Extrusion

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	0.60
Density	D 792	g/cm ³	0.924

Typical Properties:

Blow Film Properties^a

	ASTM Methods	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	25/20
Elongation at Break (MD/TD)	D 882	%	350/700
2% Secant Modulus (MD/TD)	D 882	MPa	140/170
Dart Drop Impact	D 1709	g/F ₅₀	170
Elmendorf Tear Strength (MD/TD)	D 1922	gF	310/250
Haze	D 1003	%	8,5
Gloss - Angle 45°	D 2457	-	60
Gloss - Angle 60°	D 2457	-	86

(MD = Machine Direction; TD = Transversal Direction)

(a) 50µm thickness film, processed in a 50mm blow film line with barrier screw. 25:1 L/D and a 1.0mm die gap at a 2.3:1 blow up ratio.

Recommended Processing Conditions:

Blow Film Extrusion

- Temperature Profile:.....from 150 to 185°C
- Mass Temperature:..... from 180 to 185°C
- Blow up Ratio:.....from 2,0 to 3,0:1
- Die Gap:.....1,0 mm

The optimum processing conditions will vary according to the type of equipment used and cannot be considered as performance guarantee.

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
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: 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 oxidegradation. These additives and the decomposition and disintegration of polyolefins caused by oxidegradation 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.