

## Low Density Polyethylene STS7006

### Description:

STS7006 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 STS7006 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.

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

### Additives:

Antiblocking.  
Slip agent.

### Applications:

High clarity films for coextruded food packaging, such as: cheese, meat, sausages, sliced ham, etc.

### 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 <sup>3</sup>	0.924

### Typical Properties:

Blow Film Properties<sup>a</sup>

	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/F50	170
Elmendorf Tear Strength (MD/TD)	D 1922	gF	310/250
Haze	D 1003	%	9
Gloss - Angle 45°	D 2457	-	60
Gloss - Angle 60°	D 2457	-	84

(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 1.0 mm 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 Application Engineering.
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. 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.