

## Low Density Polyethylene SEB853

### Description:

SEB853 is a low density polyethylene produced under high pressure technology. Films obtained with this product show outstanding optical properties, good sealability, and low gel content. Additives free.

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

### Applications:

Typical blown film applications include films for diapers and other general purposes as well as LLDPE and HDPE blends.

### Process:

Blown and Cast Film Extrusion

### Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190°C/2.16kg)	D 1238	g/10 min	2.7
Density	D 1505	g/cm <sup>3</sup>	0.923

### Properties:

Blown Film Properties<sup>a</sup>

	ASTM Methods	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	30/20
Elongation at Break (MD/TD)	D 882	%	270/1040
Dart Drop Impact	D 1709	g/F50	70
Elmendorf Tear Strength (MD/TD)	D 1922	gF	ND <sup>b</sup> /100
Haze	D 1003	%	5
Gloss - Angle 60°	D 2457	%	112

(a) Obtained in 75mm extruder, blow up ratio 2:1, die gap 1.0mm and 381m thickness. (b) ND: Not Determined.

### Recommended Processing

#### Conditions:

Blown Film Extrusion

- Extruder:

Screw - relation L/D.....16 a 30:1

Compression Ratio.....3 a 4:1

- Screw pack (Mesh).....40/60/40

- Temperature Profile

1st zone.....110°C

Extruder .....150°C

Die.....160°C

- Blow up ratio:.....from 2 to 3:1

- Frostline Height.....maximum equivalent to bubble diameter

### 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: 009002-88-4
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.