

Low Density Polyethylene SBC818

Description:

SBC818 is a low density polyethylene developed for coating process, it presents very good optical properties, low neck-in, good film stability, and good adhesion on porous substrate. Additives free.

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

Applications:

Extrusion coating. Injection of general parts and carrier for masterbatches.

Recommended process conditions:

Extrusion coating

- Extruder type:

Screw W/D ratio 20:1

Compression ratio, 3 to 4:1

- Temperature profile on horizontal extruder:

Barrel: from 150 to 340°C

Die and melt mass: from 300 to 340°C

Control Properties:

| | ASTM Method | Units | Values |
|----------------------------|-------------|----------|--------|
| Melt Flow Rate (190/2.160) | D 1238 | g/10 min | 8.3 |
| Density | D 1505 | g/cm3 | 0.918 |

Properties:

Blow film Properties^a

| | ASTM Method | Units | Values |
|-----------------------------------|-------------|-------|---------|
| Tensile Strength at Break (MD/TD) | D 882 | MPa | 25/20 |
| Elongation at Break (MD/TD) | D 882 | % | 380/870 |
| Flexural Modulus – 1% Secant | D 882 | MPa | 70 |
| Dart Drop Impact | D 1709 | g/F50 | 64 |
| Elmendorf Tear Strength (MD/TD) | D 1922 | gF | NDb/56 |
| Haze | D 1003 | % | 8 |
| Gloss - Angle 60° | D 2457 | % | 76 |

(a) LDPE: 25 µm thick film, obtained from a 40 mm extruder, with blow up ratio of 2.2:1, die gap 1.8 mm (MD = Machine Direction and TD = Transversal Direction).

(b) ND: Not Determined

Final Remarks:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – *Food and Drugs Administration*. 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. Unless specifically indicated, the Company does not recommend this grade for packages, parts or any other product intended for medical/pharmaceutical use.
8. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.