

## Low Density Polyethylene F 7018

### Description:

F7018 is a low density polyethylene that shows an excellent seal ability at low temperatures and indicated for low viscosity required applications. It does not contain additives.

**Application:** Masterbatches; Extrusion coating; Injected parts.

### Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	7.0
Density	D 792	g/cm3	0.918

### Typical Properties:

	ASTM Method	Units	Values
Blown Film Properties <sup>a</sup>			
Tensile Strength at Break (MD/TD)	D 882	MPa	25/20
Elongation at Break (MD/TD)	D 882	%	390/900
Flexural Modulus – 1% Secant	D 2457	MPa	80
Dart Drop Impact	D 1709	g/F50	90
Elmendorf Tear Strength (MD/TD)	D 1922	gF	NDc/55
Haze	D 1003	%	12
Gloss - Angle 60°	D 2457	%	78
Plaque Properties <sup>b</sup>			
Tensile Strength at Break	D 638	MPa	9
Tensile Strength at Yield	D 638	MPa	10
Flexural Modulus – 1% Secant	D 790	MPa	240
Shore D Hardness	D 2240	-	43
Vicat Softening Temperature at 10 N	D 1525	°C	86

(a) 25 µm Film Gauge, obtained in 75 mm extruder, die gap 1.0 mm, output 1.75 kg/h\*cm with 2:1 BUR. (MD: Machine direction; TD: Transversal direction).

(b) Test specimens prepared from compression molded sheet made according to ASTM D 4703. (c) ND: Not Determined

### Recommended Processing Conditions:

Recommended processing conditions for:

- 1) Extrusion Coating:  
- Temperature profile: 180 to 310°C.
- 2) Injection Molding  
- Temperature profile: 130 to 180°C.

The optimum processing conditions will vary according to the type of equipment used and cannot be considered 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 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. 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. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.