

## Ethylene-Vinyl Acetate Copolymer TN2006

### Description:

TN2006 is an Ethylene-Vinyl Acetate (EVA) copolymer with good mechanical properties, high flexibility and toughness even at low temperatures. It has excellent optical and heat selability properties. Additionally, this product has good water vapor barrier. The rheological properties allow processability in tubular film extrusion equipment, being able to be coextruded in combination with many other materials.

### Additives

Antioxidant

### Application:

Heat seal layer in coextruded and laminated films.

Food packaging.

Hood stretch films.

Base polymer for agricultural films.

Geomembranes.

### Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	0.70
Vinyl-Acetate Content	Braskem1	%	18.0

### Typical Properties:

#### Plaque Properties<sup>a</sup>

	ASTM Method	Units	Values
Density	D 1505	g/cm3	0.940
Tensile Strength at Break	D 638	MPa	33
Elongation at Break	D 638	%	680
Hardness	D 2240	Shore A / D	89/39
Melting Point	D 3418	°C	90
Vicat Softening Temperature at 10 N	D 1525	°C	70

#### Blow Film Properties<sup>b</sup>

	ASTM Method	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	38/33
Elongation at Break (MD/TD)	D 882	%	820/ 700
2% Secant Modulus (MD/TD)	D 882	MPa	39/38
Dart Drop Impact Strength	D 1709 (Method B)	gf	950
Elmendorf Tear Strength (MD/TD)	D 1922	gF	210/320
Haze	D 1003	%	2
Gloss - Angle 45°	D 2457	-	92

(MD = Machine Direction; TD = Transversal Direction)

(1) Braskem test method available for customers.

(a) Compressed molded plate. Method ASTM D 4703.

(b) 50 µm thickness film, processed in a 50 mm 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 190°C
- Mass Temperature:..... from 175 to 190°C
- Blow up Ratio:.....from 2.0 to 3.0:1
- Die Gap:.....1.0 to 1.5 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 "Ethylene-Vinyl Acetate Copolymers", as defined in 21 CFR, section **177.1350** issued by FDA – Food and Drugs Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA.
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: 24937-78-8.
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.

