Braskem

# Data Sheet

## Linear Low Density Polyethylene IF33

**Description**:
IF33 is a Linear Low Density Polyethylene, with narrow molecular weight, produced by solution process, for injection molding applications. It offers high fluidity, good flexibility and low warpage. It contains antioxidant additive.

**Application:**
Resin has been specifically developed for injection molding lids seal and lids for food containers, housewares, containers and general purpose.

**Control Properties:**

| | ASTM Methods | Units | Values |
|---|---|---|---|
| Melt Flow Rate (190/2.16) | D 1238 | g/10 min | 48 |
| Density | D 729 | g/cm³ | 0.931 |

**Typical Properties:**
Plaque Propertiesa

| | ASTM Methods | Units | Values |
|---|---|---|---|
| Tensile Strength at Yield | D 638 | MPa | 15 |
| Tensile Elongation at Yield | D 638 | % | 14 |
| Tensile Strength at Break | D 638 | MPa | 9 |
| Tensile Elongation at Break | D 638 | % | 100 |
| Tensile Modulus – 1% Secant | D 790 | MPa | 550 |
| Shore D Hardness | D 2240 | - | 51 |
| Notched Izod Impact Strength | D 256 | J/m | 60 |
| Environmental Stress Cracking Resistanceb | D 1693 | h/F50 | - |
| Vicat Softening Temperature at 10 N | D 1525 | °C | 100 |
| Deflection Temperature under Load at 0.455 MPa | D 648 | ºC | 52 |
| Rigidity | D 747 | MPa | 490 |

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.
(b) Compression molded 2 mm thickness, 0.3 mm notched-plaques; 10% Igepal; 50ºC.

**Recommended Processing Conditions:**
IF 33 has been developed to be used in the injection molding process under conditions comparable to the Linear Low Polyethylene.
Recommended temperature profile: 150 to 210ºC.