

## Low Density Polyethylene EB853/72

### Description:

EB853/72 is a grade produced under high pressure in a Tubular reactor. Films obtained with this product show outstanding optical properties, good sealability, and low gel amount.

### Additive:

Slip Medium  
Antiblock Medium

### Applications:

Lamination film; general purpose; automatic packaging of solids products (FFS)

### Process:

Blown Film Extrusion

### Control Properties:

|                           | ASTM Method | Units             | Values |
|---------------------------|-------------|-------------------|--------|
| Melt Flow Rate (190/2.16) | D 1238      | g/10 min          | 2.7    |
| Density                   | D 792       | g/cm <sup>3</sup> | 0.923  |

### Properties:

Blown Film Properties<sup>a</sup>

|                                   | ASTM Method | Units | Values   |
|-----------------------------------|-------------|-------|----------|
| Tensile Strength at Break (MD/TD) | D 882       | MPa   | 25/20    |
| Elongation at Break (MD/TD)       | D 882       | %     | 350/1050 |
| Dart Drop Impact                  | D 1709      | g/F50 | 80       |
| Elmendorf Tear Strength (MD/TD)   | D 1922      | gF    | 580/210  |
| Haze                              | D 1003      | %     | 7        |
| Gloss - Angle 60°                 | D 2457      | %     | 75       |

(a) 40 µm thickness film, processed in a 75 mm screw diameter extruder with blow up ratio of 2:1, die gap 1.0 mm, (MD = Machine Direction; TD = Transversal Direction);

(b) ND: Not Determined.

### Recommended Processig Conditions:

#### Blown Film Extrusion

- Extruder:

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

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

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

- Temperature Profile

1<sup>a</sup> zone.....110°C

Extruder .....150°C

Die.....160°C

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

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

