

## Low Density Polyethylene LD4003

### Description:

LD4003 is a Low Density Polyethylene produced under high pressure conditions in a tubular reactor. It offers good processability and excellent mechanical and optical properties.

### Additives:

Slip and Antiblock

### Application:

Films for general purposes, technical films for automatic packaging and blends with LLDPE.

### Process:

Recommended processing conditions for film extrusion about 150 -165 °C. The optimum processing conditions will vary according to the type of equipment used and cannot be considered as performance guarantee.

### Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	1,9
Density	D 792	g/cm3	0.922

### Typical Properties:

Blow Film Properties<sup>a</sup>

	ASTM Methods	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	25/20
Elongation at Break (MD/TD)	D 882	%	590/920
1% Secant Modulus (MD/TD)	D 882	MPa	145/150
Dart Drop Impact	D 1709	g/F50	140
Elmendorf Tear Strength (MD/TD)	D 1922	gF	460/300
Haze	D 1003	%	7
Gloss - Angle 45°	D 2457	%	79
Gloss - Angle 60°	D 2457	%	116

(MD = Machine Direction; TD = Transversal Direction)

(a) 70 µm thickness film, processed in a 70 mm blow film line with barrier screw. 25:1 L/D and a 1,2 mm die gap at a 2,2:1 blow up ratio.

### Recommended Processing Conditions:

#### Cast Film Extrusion

- Temperature Profile:.....from 150 to 165°C
- Blow up Ratio:.....from 2,0 to 4,5: 1
- Screw - relation L/D.....16 a 30:1

