

# Lotrène® FB3003

## LOW DENSITY POLYETHYLENE

### DESCRIPTION

Lotrène® FB3003 is an additive free grade mainly recommended for heavy duty film applications.

### PROPERTIES

Lotrène® FB3003 has a suitable molecular structure to produce film with excellent mechanical properties, outstanding shrink properties. It has a high stress cracking resistance.

POLYMER PROPERTIES	VALUE	UNIT	TEST METHOD
Melt Flow Index	0.30	g/10 min.	ASTM D-1238
Density @ 23 °C	0.920	g/cm <sup>3</sup>	ASTM D-1505
Crystalline Melting Point	109	°C	ASTM E-794
Vicat Softening Point	95	°C	ASTM D-1525

FILM PROPERTIES	VALUE	UNIT	TEST METHOD
Tensile Strength @ Yield MD/TD	16/11	MPa	ASTM D-882
Tensile Strength @ Break MD/TD	25/25	MPa	ASTM D-882
Elongation @ Break MD/TD	550/600	%	ASTM D-882
Impact Strength, F 50	220	G	ASTM D-1709
Coefficient of Friction	0.50	-	ASTM D-1894
Haze	13	%	ASTM D-1003
Gloss (@ 45 °)	40	GU	ASTM D-2457
Clarity	25	%	ASTM D-1746

(The above properties are measured on a blown film of 50 μ, @ 2.5 BUR)

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**Note:** The values given in this technical data sheet are the results of tests carried out in accordance with standard test procedures. They are given as indication to enable customers to make the best use of our products but must be considered as average values provided without implying any undertaking on our part.

### PROCESSING

Lotrène® FB3003 can be easily processed on all types of extruders designed for polyethylene.

The melt temperature is suggested to be in the range of 180-210 °C.

The best properties of the blown film are achieved at blow up ratios between 2.5:1 and 3.5:1.

To avoid blocking and shrinkage on the reel, the temperature at the nip rolls and take-off should be kept as close as possible to the ambient temperature.

The recommended thickness range is from 50 µm 250 µm.

### APPLICATIONS

- Heavy duty bags
- Industrial shrink film
- Shrink films for pallets shrink wrap
- Construction film
- Agricultural film
- Drip irrigation pipe
- Blow moulded bottles (< 250 ml >)
- Cable jacketing

### SAFETY AND STORAGE

Under normal conditions Lotrène® FB3003 does not present a toxic hazard through skin contact or inhalation. During processing, contact with molten polymer and inhalation of volatilized fumes should be avoided.

Lotrène® FB3003 complies with food grade regulations FDA, 21 FR chapter 177-1520 'Olefin Polymers'. Items made from this grade do not transmit tests nor odor to the material in contact with.

Lotrène® FB3003 is inflammable and combustible (category 3) according to ISO R 1210.

Lotrène® FB3003 is supplied in plastic bags of 25 kg (net weight) each. The bags are stacked and shrink wrapped on pallets of 1500 kg each (net weight). The product is forwarded either by trucks or in 20-foot sea containers.

Lotrène® FB3003 should not be stored for more than three months nor be exposed to direct sunlight and/or heating during storage since this may adversely affect the properties of the product.

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