# Lotrène® FE8000 LOW DENSITY POLYETHYLENE

## **DESCRIPTION**

Lotrène® FE8000 is an additive free grade mainly recommended for the light and medium duty film application with good optical properties and medium rigidity.

## **PROPERTIES**

Lotrène® FE8000 produces films that are very strong, sufficiently rigid for automatic packaging machines, suitable for shrink wrapping and have good optical properties.

POLYMER PROPERTIES	VALUE	UNIT	TEST METHOD
Melt Flow Index	0.80	g/10 min.	ASTM D-1238
Density @ 23 °C	0.923	g/cm³	ASTM D-1505
Crystalline Melting Point	112	°C	ASTM E-794
Vicat Softening Point	95	°C	ASTM D-1525

FILM PR	OPERTIES	VALUE	UNIT	TEST METHOD
Tensile St	rength @ Yield MD/TD	16/12	MPa	ASTM D-882
Tensile St	rength @ Break MD/TD	24/22	MPa	ASTM D-882
Elongation	n @ Break MD/TD	500/600	%	ASTM D-882
Impact St	rength, F 50	150	G	ASTM D-1709
Coefficier	nt of Friction	0.45	-	ASTM D-1894
Haze		8.5	%	ASTM D-1003
Gloss (@	45 °)	60	GU	ASTM D-2457
Clarity		45	%	ASTM D-1746

(The above properties are measured on a blown film of 50  $\mu,\,$  @ 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® FE8000 can be easily processed on all types of extruders designed for polyethylene and over a wide range of extrusion conditions.

The melt temperature is suggested to be in the range of 160-180 °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 30 µm 200 µm.

### **APPLICATIONS**

- Shrink wrap film for light and medium duties
- Shopping bags
- Lamination film

### **SAFETY AND STORAGE**

Under normal conditions Lotrène® FE8000 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® FE8000 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® FE8000 is inflammable and combustible (category 3) according to ISO R 1210.

Lotrène® FE8000 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® FE8000 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.

