



# FD0274

# Low Density Polyethylene

## **DESCRIPTION**

Lotrène<sup>®</sup> FD0274 is mainly recommended for the extrusion of thin film for light and medium duty applications. It contains both slip additives (target 600 ppm erucamide) and anti blocking additives (target 900 ppm) as well as antioxidants.

### **PROPERTIES**

The molecular structure of Lotrène® FD0274 makes it possible to produce very thin, clear and glossy films.

POLYMER PROPERTIES	VALUE	UNIT	TEST METHOD
Melt Flow Index	2.4	g/10 min.	ASTM D1238-
Density @ 23 °C	0.923	g/cm3	ASTM D1505-
Crystalline Melting Point	108	°C	ASTM E794-
Vicat Softening Point	89	°C	ASTM D1525-

FILM PROPERTIES	VALUE	UNIT	TEST METHOD
Tensile Strength @ Yield MD/ TD	11/11	MPa	ASTM D882-
Tensile Strength @ Break MD/ TD	24/22	MPa	ASTM D882-
Elongation @ Break MD/ TD	300/600	%	ASTM D882-
Impact Strength, F 50	110	g	ASTM D1709-
Tear resistance MD/ TD	65/35	N/mm	ASTM D- 1922
Puncture Force	30	Ν	Internal Method
Coefficient Of friction	0.12		ASTM D1894-
Haze	8.0	%	ASTM D1003-
Gloss @ °45	59		ASTM D2457-

(Film properties stated above have been obtained using 40 µm blown films laboratory test specimens produced under following conditions: 45 mm screw with L/D = 30, die diameter 120 mm, die gap 1.56 mm, BUR 2.5:1).

### PROCESSING

Lotrène® FD0274 can be easily processed on all types of extruders to make blown or cast films.

The melt temperature is suggested to be in the range of 150-140 °C.

The best properties of the blown film are achieved at blow up ratios between 2:1 and 3:1.

To avoid blocking and shrinkage on the reel, 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 20  $\mu m$  to 100  $\mu m$