

# FD0374

## Low Density Polyethylene

### DESCRIPTION

Lotrène® FD0374 is mainly recommended for the extrusion of very thin film for light duty applications. It contains both slip additives (target 600 ppm erucamide) and anti blocking additives (target 900 ppm) as well as antioxidants.

### PROPERTIES

Lotrène® FD0374 provides excellent clarity, high gloss and low haze films. It also shows excellent processability and draw down.

POLYMER PROPERTIES	VALUE	UNIT	TEST METHOD
Melt Flow Index	3.5	g/10 min.	ASTM D-1238
Density @ 23 °C	0.923	g/cm <sup>3</sup>	ASTM D-1505
Crystalline Melting Point	108	°C	ASTM E-794
Vicat Softening Point	89	°C	ASTM D-1525

FILM PROPERTIES	VALUE	UNIT	TEST METHOD
Tensile Strength @ Yield MD/ TD	11/11	MPa	ASTM D-882
Tensile Strength @ Break MD/ TD	25/22	MPa	ASTM D-882
Elongation @ Break MD/ TD	320/600	%	ASTM D-882
Impact Strength, F 50	100	g	ASTM D-1709
Tear resistance MD/ TD	65/35	N/mm	ASTM D- 1922
Coefficient Of friction	0.11	-	ASTM D-1894
Haze	8	%	ASTM D-1003
Gloss @ 45°	56	-	ASTM D-2457

(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® FD0374 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 140-150 °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 µm to 100 µm