

Lotrène® Q3018C

LINEAR LOW DENSITY POLYETHYLENE

Linear Low Density Polyethylene (LLDPE)

DESCRIPTION AND USE

Lotrène® Q3018C is a Linear Low Density Polyethylene resin produced in a gas phase reactor using butene (C4) co-monomer.

Lotrène® Q3018C is a cast film extrusion grade.

Lotrène® Q3018C can be processed at high output rates with good web stability and gauge control on cast film machines designed for LLDPE. Lotrène® Q3018C can advantageously be blended with LDPE or other PE resins used in cast film mono extrusion or co - extrusion to improve film properties .

ADDITIVE PACKAGE

Product	Slip (Erucamide)	Antiblock	Processing aid	Thermal Stabilizers
Q3018C	no	no	no	Yes (cast film)

CHARACTERISTICS

Property	Method	Unit	Value
Density (*)	ASTM D792	g/cm³	0.918
Melt Flow Rate (190 °C/2.16 kg)	ASTM D1238	g/10 min	2.8
Melting poin temperature	Internal	°C	122
Vicat temperature	ASTM D1525- (A120)	°C	101

(* density of base resin)

CAST FILM PROPERTIES

Properties	Method	Unit	Value (*)
Tensile Strength at Yield MD/TD	ASTM D-882	MPa	10.2 / 9.7
Tensile Strength at Break MD/TD	ASTM D-882	MPa	49 / 27
Elongation at Break MD/TD	ASTM D-882	%	510 / 860
Elmendorf tear resistance MD/TD	ASTM D- 1922	N/mm	31 / 147
Secant modulus at %1 MD/TD	ASTM D-882	MPa	171 / 179
Dart test, F50	ASTM D-1709	g	60
Puncture force	ASTM D5748	N	20
Puncture energy	ASTM D5748	J	1.4
Haze	ASTM D-1003	%	1.4
Gloss @ °45	ASTM D2457		91

The above properties are measured 20 µm films produced on a cast film line under the following parameters: 30 mm screw, L/D = 30:1, die length = 600 mm, die gap = 0.8 mm, line speed = 50 m/min, temperature setting = 180 - 230 °C. Melt temperature 250°C. Chill roll temperature: 25°C

PROCESSING

Lotrène® Q3018C Is typically extruded on conventional cast film extrusion equipment at a melt temperature between 250 and 300 ° C