



Lotrène® Q1018 Series

LINEAR LOW DENSITY POLYETHYLENE



Linear Low Density Polyethylene (LLDPE)

DESCRIPTION AND USE

Lotrène Q1018 Series are Linear Low Density Polyethylene resins produced in a gas phase reactor using butene (C4) co-monomer.

They are designed for blown film applications and can be used in pure form as well as blended with other PE resins, such as LDPE or HDPE and mPE resins for mono extrusion or co-extrusion process to modify film properties. Lotrène® Q1018 Series are suited for many applications in the field of consumer, agricultural, industrial, food or hygiene packaging, for example: collation shrink, liners, FFS bags, heavy duty sacks, refuse, tunnel films, mulching films...

ADDITIVE PACKAGE

PRODUCT	SLIP (ERUCAMIDE) (PPM)	ANTIBLOCK (PPM)	THERMAL STABILIZERS
Q1018N	no	no	Yes (blown film)
Q1018H	1500	3200	Yes (blown film)

Values indicated are target values. Actual values might differ from batch to batch.

PROPERTIES

POLYMER PROPERTIES	VALUE	UNIT	TEST METHOD
Density* @ 23 °C	0.918	g/cm3	ASTM D792-
Melt Flow Index (190 °C /2.16 kg)	1.0	g/10 min.	ASTM D1238-
Crystalline Melting Point	122	°C	Internal
Vicat Softening Point	100	°C	ASTM D1525- (A120)

(* Density of base resin)

FILM PROPERTIES	VALUE (*)	UNIT	TEST METHOD
Tensile Strength @ Yield MD/ TD	11/11	MPa	ASTM D882-
Tensile Strength @ Break MD/ TD	33/38	MPa	ASTM D882-
Elongation @ Break MD/ TD	850/800	%	ASTM D882-
Secant modulus @ %1 MD/ TD	245/215	MPa	ASTM D882-
Impact Strength, F 50	150	g	ASTM D1709-
Tear resistance MD/ TD	480/280 120/70	g N/mm	ASTM D- 1922
Haze	11	%	ASTM D1003-
Gloss (@ 45 °)	60	-	ASTM D2457-

(The above properties are measured on a blown film under following parameters:
Screw 45 mm, L/D 30, die gap 2.2 mm, output 30 kg/hr, mass temperature 210°C, thickness 40 µm and BUR 2.5:1)