



Lotrène® Q2018 Series

LINEAR LOW DENSITY POLYETHYLENE



Linear Low Density Polyethylene (LLDPE)

DESCRIPTION AND USE

Lotrène® Q2018 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® Q2018 Series are suited for many applications in the field of consumer, industrial, food or hygiene packaging such as freezer film, bread bags, shoppers and bags as well as lamination film and multilayer packaging film.

ADDITIVE PACKAGE

Product	Slip (Erucamide) (ppm)	Antiblock (ppm)	Thermal Stabilizers
Q2018N	no	no	Yes (blown film)
Q2018H	1500	3200	Yes (blown film)
Q2018C	no	no	Yes (cast film)

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

PROPERTIES

POLYMER PROPERTIES	VALUE	UNIT	TEST METHOD
Density*	0.918	g/cm ³	ASTM D792-
Melt Flow Index (190 °C /2.16 kg)	2.0	g/10 min.	ASTM D1238-
Crystalline Melting Point	121	°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	32/35	MPa	ASTM D882-
Elongation @ Break MD/ TD	900/850	%	ASTM D882-
Secant modulus @ %1 MD/ TD	245/215	MPa	ASTM D882-
Impact Strength, F 50	130	g	ASTM D1709-
Tear resistance MD/ TD	420/220 105/55	g N/mm	ASTM D- 1922
Haze	14	%	ASTM D1003-
Gloss (@ 45 °)	55	-	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 °210C, thickness 40 µm and BUR 2.5:1)

HANDLING & STORAGE

Polyethylene products should be stored in their original packaging or in clean appropriate silos. The products should be stored in a dry and well-ventilated area and should not be exposed to direct sunlight and/or heat in any form since this may adversely affect their properties. As a general rule, our products should not be stored for more than three months from receipt date.

SAFETY

Under normal conditions Lotrène® products do not present a toxic hazard through skin contact or inhalation. For detailed information please refer to the Safety Data Sheet.

FOOD CONTACT & REACH

Lotrène® polyethylene products manufactured by Qatofin Company Ltd (Qatofin) comply with US, EU and other food contact legislations. Limitations may apply. Please contact your Muntajat representative for detailed compliance certificates.

All Qatofin Lotrène products are complying with REACH Regulation 1907/2006/EC. The aims of this regulation are to improve the protection of human health and the environment through better and earlier identification of the intrinsic properties of chemical substances.

NOT SUITABLE FOR PHARMACEUTICAL OR MEDICAL APPLICATIONS

Lotrène® products are not suitable for pharmaceutical or medical applications.

