Lotrène® Q2018C

LINEAR LOW DENSITY POLYETHYLENE
(LLDPE)

DESCRIPTION AND USE

Lotrène® Q2018C is a Linear Low Density Polyethylene resin produced in a gas phase reactor using butene (C4) co-monomer.
Lotrène® Q2018C is a cast film extrusion grade. It is intended for the melt index 2.0 stretch-film market. It is suitable for many applications in the field of consumer, industrial, food or hygiene packaging as well as non-packaging applications like agricultural films e.g. mulching films
Lotrène® Q2018C can be processed at optimal output rates with moderate extrusion pressure, good web stability and gauge control on cast film machines designed for LLDPE.

Lotrène® Q2018C 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
Q2018C	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	2.0
Melting point	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	9.4/10.1
Tensile strength at break MD/TD	ASTM D-882	MPa	49/27
Elongation at break MD/TD	ASTM D-882	%	450/780
Elmendorf tear resistance MD/TD	ASTM D- 1922	N/mm	18/159
Secant modulus at 1% MD/TD	ASTM D-882	MPa	171/181
Dart test, F50	ASTM D-1709	g	63
Puncture force	ASTM D5748	N	25
Puncture energy	ASTM D5748	J	1.6
Haze	ASTM D-1003	%	1.6
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® Q2018C can be extruded on conventional cast film extrusion equipment under melt temperature range of 250-300 °C.

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

All Qatofin Lotrène products are comply 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.

TECHNICAL DISCLAIMER

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited for and the information is applicable to the user's specific application. Any data included herein is based upon analysis of representative samples in a laboratory environment and not the actual product shipped. The values indicated in this datasheet should not be used for specification purposes. The information in this document relates only to the named product or material when not in combination with any other product or materials. The information is based on data believed to be reliable on the date compiled. We do not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contact, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues for which any liability for infringement or alleged infringement are fully disclaimed, as well as any international laws which may be encountered in the use thereof. Such questions should be investigated by the user. Trademarks may not be used in any manner other than expressly authorized in a written agreement and no trademark or license rights of any kind are granted hereunder, by implication or otherwise.

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