Technical Data Sheet

Lotrène®Q2018C

Linear Low Density Polyethylene (LLDPE)

Description and Use

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.

Lotrène® Q2018C is suited for many applications in the field of consumer, industrial, food or hygiene packaging as well as stretch film and non-packaging applications like agricultural films e.g. mulching films.

Additive Package

Product	Slip (Erucamide)	Antiblock	Processing aid	Thermal Stabilizers
Q2018C	no	no	no	Yes, cast film

Characteristics

Property	Method	Unit	Value
Density (*)	ASTM D-792	g/cm³	0.918
Melt Flow Rate (190°C/2.16 kg)	ASTM D-1238	g/10 min	2.0
Melting temperature	Internal	°C	121
Vicat temperature	ASTM D-1525 (A120)	°C	100

Values indicated are typical for this product. Density and MFR are properties routinely measured during “the standard quality control procedure”. Other figures are generated by tests not included in the "standard quality control procedure", and are given for information only. Data are not intended for specification purposes.
(*) density on base resin

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Cast film properties

These values have been measured on a 20 µm film.

properties	Method	Unit	Value (*)
Tensile Strength at Yield MD/TD	ASTM D-882	MPa	9.7 / 9.6
Tensile Strength at Break MD/TD	ASTM D-882	MPa	37 / 23
Elongation at Break MD/TD	ASTM D-882	%	330 / 670
Elmendorf tear resistance MD/TD	ASTM D- 1922	N/mm	12 / 193
Secant modulus at 1% MD/TD	ASTM D-882	MPa	165 / 170
Dart test, F50	ASTM D-1709	g	35
Puncture force	ASTM D5748	N	25
Puncture energy	ASTM D5748	J	1.6
Haze	ASTM D-1003	%	1.8
Gloss @ 45°	ASTM D2457	gu	92

Note: The values given in this technical data sheet are the results of tests carried out in accordance with standard test procedures. They are given as indication to enable customers to make the best use of our products but must be considered as average values provided without implying any undertaking from the manufacturer. Actual properties might differ depending on extrusion conditions.
(*) the above properties are measured on cast 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 is typically extruded at a melt temperatures between 220 and 250°C.
Lotrène®Q2018C can be cast in the following conditions on machine designed for LLDPE:
>> Extrusion temperature: 180 to 250°C
>> Line speed: > 400 m/min
>> Die gap: > 0.8 mm
An excellent blending ability of LOTRÈNE Q2018C with LDPE and HDPE and mLLDPE was observed.

Handling and storage

Lotrène®Q2018C should be stored in its original Packaging or in clean appropriate silos.
The product should be stored in a dry and well ventilated area.

Lotrène® Q2018C should not be stored for more than three months nor be exposed to direct sunlight and/or heating during storage since this may adversely affect the properties of the product.

NB: **Lotrène**®Q2018C is not suitable for application in the pharmaceutical or medical sector.