



## SAFFRON GROUP

# Q2018 - Linear Low Density Polyethylene

## Product Specification

### DESCRIPTION AND USE

Q2018 is 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. 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 (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	0.9	g/cm <sup>3</sup>	ASTM D-792
Melt Flow Index (190 °C/2.16 kg)	2.0	g/10 min.	ASTM D-1238
Crystalline Melting Point	121	°C	Internal
Vicat Softening Point	100	°C	ASTM D-1525 (A120)

(\*Density of base resin)

FOR MORE INFORMATION :

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FILM PROPERTIES	VALUE (*)	UNIT	TEST METHOD
Tensile Strength @ Yield MD/TD	11/11	Mpa	ASTM D-882
Tensile Strength @ Break MD/TD	35/32	Mpa	ASTM D-882
Elongation @ Break MD/TD	850/900	%	ASTM D-882
Secant Modulus @1% MD/TD	215/245	Mpa	ASTM D-882
Impact Strength, F 50	130	g	ASTM D-1709
Tear Resistance MD/TD	220/420 55/105	g N/mm	ASTM D-1922
Haze	14	%	ASTM D-1003
Gloss (@ 45°)	55		ASTM D-2457

(The above properties are measured on ablown film under following parameters:

Screw 45 mm,L/D 30, die gap 2.2 mm, output 30 kg/hr, mass temperature 210°C, thickness 40µm and BUR 2.5:1)

## PROCESSING

Extrusion temperatures: 170-210 °C Melt temperature 190 \*C

Blow-up ratio: 2:1 to 3:1

Die gap: > 1.8 mm

Q2018 can be processed at high output rates with moderate extrusion pressure, good bubble stability and gauge control on blown film lines designed for LLDPE.

Q2018 can be blended with LDPE and other PE resins in order to improve film properties or processability on conventional mono or co extrusion machines.

## 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 Q2018 product does not present a toxic hazard through skin contact or inhalation. For detailed information please refer to the Safety Data Sheet.

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**NOT SUITABLE FOR PHARMACEUTICAL OR MEDICAL APPLICATIONS**  
Q2018 product is not suitable for pharmaceutical or medical applications.

## **Technical Disclaimer**

The values reported in this technical data sheet are the results of tests carried out in accordance with standard test procedures in a laboratory environment. Actual properties may vary depending on batch and extrusion conditions. Therefore, these values should not be used for specification purposes. 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 suitable for, and the information is applicable to, the user's specific application. Muntajat does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, expressed 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 risks and liabilities, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. 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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