

# Lotrène® FB3003

LOW DENSITY POLYETHYLENE  
(LDPE)

## DESCRIPTION

Lotrène® FB3003 is an additive free grade, produced by an autoclave high pressure process, mainly recommended for heavy duty film application.

## PROPERTIES

Lotrène® FB3003 has a molecular structure allowing to produce films with excellent mechanical properties, outstanding shrink properties and excellent bubble stability. It has a high stress cracking resistance. Lotrène® FB3003 is mainly recommended for heavy duty film applications.

## PROCESSING

Lotrène® FB3003 can be easily processed on all types of extruders designed for polyethylene.

The melt temperature is suggested to be in the range of 180-210 °C.

The best and balanced properties of the blown film are achieved at blow up ratios between 2:1 and 3.5:1.

The recommended thickness range is from 50 µm to 250 µm.

POLYMER PROPERTIES	VALUE	UNIT	TESTING METHOD
Melt flow index	0.30	g/10 min.	ASTM D-1238
Density @ 23 °C	0.920	g/cm3	ASTM D-1505
Crystalline melting point	109	°C	ASTM E-794
Vicat softening point	96	°C	ASTM D-1525

FILM PROPERTIES	VALUE	UNIT	TESTING METHOD
Tensile strength @ yield MD/ TD	14/11	MPa	ASTM D-882
Tensile strength @ break MD/ TD	30/27	MPa	ASTM D-882
Elongation @ break MD/ TD	250/555	%	ASTM D-882
Tear resistance MD/ TD	21/26	N/mm	ASTM D-1922
Impact strength, F 50	175	g	ASTM D-1709
Puncture force	60	N	Internal Method
Coefficient Of friction	0.50		ASTM D-1894
Haze	34	%	ASTM D-1003
Gloss @ 45°	19		ASTM D-2457

*(Film properties stated above have been obtained using 40µm blow films laboratory test specimens produced under following conditions: 45 mm screw L/D= 30, die diameter 120mm, die gap 1.56 mm, BUR 2.5:1).*

## APPLICATIONS

- Heavy duty bags
- Industrial shrink film and shrink film for pallets
- Construction film
- Agricultural film
- Drip irrigation pipe
- Small blow molded bottles

## 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 Qatar Petrochemical Company (QAPCO) Q.P.J.S.C. 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 contract, 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.