

## POLYMERS

# SABIC<sup>®</sup> LLDPE 318BJD

## LINEAR LOW DENSITY POLYETHYLENE

## PRODUCT DESCRIPTION

SABIC<sup>®</sup> LLDPE 318BJD is a butene linear low-density polyethylene resin typically designed for easy processing and specially formulated for optimum thermal stability at high temperatures used in cast film extrusion. Cast film produced from SABIC<sup>®</sup> LLDPE 318BJD exhibit excellent optical properties puncture resistance and tear strength. SABIC<sup>®</sup> LLDPE 318BJD is TNPP free. This product is not intended for and must not be used in any pharmaceutical/medical applications.

## TYPICAL APPLICATIONS

SABIC<sup>®</sup> LLDPE 318BJD resin is typically used for hand and pallet stretch wrap, cling film, melt embossed film and other genera-purpose application.

## TYPICAL DATA

PROPERTIES	Unit	Value <sup>(1)</sup>	Test Method
Melt Index at 190 °C and 2.16 kg	g/10 min	2.8	ASTM D 1238
Density @ 23°C <b>(1)</b>	Kg/m <sup>3</sup>	918	ASTM D 1505
<b>MECHANICAL PROPERTIES (2)</b>			
<b>MECHANICAL PROPERTIES</b>			
Tensile test			
stress at break	MPa	13	ASTM D638
strain at yield	%	16	ASTM D638
stress at yield	MPa	12	ASTM D638
strain at break	%	710	ASTM D638
Flexural test			
Secant modulus at 1% elongation	MPa	251	ASTM D790
Hardness Shore D	-	48	ISO 868
Gloss (45°)	%	93	ASTM D2457
Haze	%	1.9	ASTM D1003
Dart impact	kJ/m	2.6	ISO 7765-2
Tear strength TD	kN/m	140	ISO 6383-2
Protrusion Puncture resistance	ASTM	2.0 J	D5748-95
Elastic recovery	%	51.9	ASTM D5459-95
Stress retention		78.1	ASTM D5459-95
Vicat Softening Temperature			
at 10 N (VST/A)	°C	102	ISO 306
DSC test			
melting point	°C	121	SABIC method
<b>ELECTRICAL PROPERTIES</b>			
Volume resistivity	8.5E15	Ω.cm	ASTM D257

(1) Typical values: not to be construed as specification limits.

(2) Properties have been measured by producing 40 µm film with 2.5 BUR using 100% 318BJD not based on compression mold

## Processing Conditions

SABIC® LLPDE 318BJD is extrudable with conventional cast film extrusion equipment. Minor machine modifications may be required for optimum use.

Cast film melt temperature: 250 - 280°C Chill roll temperature: 20°C

## HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available on the Internet ([www.SABIC.com](http://www.SABIC.com)).

Additional specific information can be requested via your local Sales Office."

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical/medical applications.

## QUALITY

SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO 9001.

## ENVIRONMENT AND RECYCLING

The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC Europe considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC Europe whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

## STORAGE AND HANDLING

Polyethylene resins should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions, which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process Polyethylene resins within 6 months after delivery.

## DISCLAIMER

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