

SABIC® LLDPE 318BJA

LINEAR LOW DENSITY POLYETHYLENE
REGION AMERICAS

DESCRIPTION

SABIC® LLDPE 318BJA 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® LLDPE 318BJA exhibit excellent optical properties, puncture resistance and tear strength. SABIC® LLDPE 318BJA is TNPP free.

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

TYPICAL APPLICATIONS

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

TYPICAL PROPERTY VALUES

Revision 20240202

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	2.8	g/10 min	ASTM D1238
Density	918	kg/m ³	ASTM D1505
OPTICAL PROPERTIES ^{(1) (2)}			
Haze	2.0	%	ASTM D1003
Gloss (45°)	96	%	ASTM D2457
FILM PROPERTIES			
Tensile test film ^{(1) (2)}			
Stress at break MD	40	MPa	ASTM D882
Stress at break TD	20	MPa	ASTM D882
Strain at break MD	500	%	ASTM D882
Strain at break TD	800	%	ASTM D882
Dart Impact Strength	60	g	ASTM D1709
Stress at yield MD	13	MPa	ASTM D853
Stress at yield TD	10	MPa	ASTM D882
Secant modulus 1% MD	135	MPa	ASTM D882
Secant modulus 1% TD	140	MPa	ASTM D882
Puncture Force	40	N	SABIC method
Puncture Energy	1.9	J	SABIC method
Elmendorf Tear Strength MD	65	g	ASTM D1922
Elmendorf Tear Strength TD	300	g	ASTM D1922
THERMAL PROPERTIES			
DSC test			
Melting point	121	°C	SABIC method

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

(2) Cast film processing conditions: Film thickness 35 µm. Die Gap 31.5mil (0.8 mm), Melt Temperature 235C, Chill Roll Temperature: 180C, and Haul Off Speed 15m/min



PROCESSING CONDITIONS

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

Cast film melt temperature: 250 - 300°C Chill roll temperature: 20°C

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

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.