

Revision 20231213

# SABIC® LLDPE 319BJ

LINEAR LOW DENSITY POLYETHYLENE

## **DESCRIPTION**

LLDPE 319BJ is a butene Linear Low Density Polyethylene for general cast extrusion film applications. Main Characteristic and Applications:

- Used in Industrial, Food & Specialty Packaging
- Better optics and processability
- Better color stability

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

## **TYPICAL APPLICATIONS**

Shipping sacks, ice bags, frozen food bags, stretch wrap film, produce bags, liners, carrier bags, garbage bags, agricultural films, laminated and coextruded films for meat wrap, frozen food and other food packaging, shrink film (for blending with LDPE), industrial consumer packaging, and high clarity film applications if blended with (10~20%) LDPE.

## TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Density			
Density	0.918	g/cm <sup>3</sup>	ASTM D792
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	3.0	g/10 min	ASTM D1238
OPTICAL PROPERTIES <sup>(1)</sup>			
Gloss			
Gloss (45°)	95	-	ASTM D2457
Haze <sup>(1)</sup>	1.34	%	ASTM D1003
FILM PROPERTIES <sup>(1)</sup>			
Dart Impact Strength			
Dart Drop Impact	53	g	ASTM D1709
Elmendorf Tear Strength			
Tear Strength, MD	54	g	ASTM D1922
Tear Strength, TD	255	g	ASTM D1922
Tensile test film			
2% secant modulus, MD	194	MPa	ASTM D882
2% secant modulus, TD	174	MPa	ASTM D882
Stress @ Yield, MD	9.4	MPa	ASTM D882
Stress @ Yield, TD	8	MPa	ASTM D882
Stress @ Break, MD	30	MPa	ASTM D882
Stress @ Break, TD	20.7	MPa	ASTM D882
Strain @ Break, MD	562	%	ASTM D882
Strain @ Break, TD	604	%	ASTM D882

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# CHEMISTRY THAT MATTERS



(1) Fabrication Conditions are: Die Gap 31.5mil (0.8 mm), Melt Temperatire 235C, Chill Roll Temperature: 18C, and Haul Off Spedd 15m/min

### **PROCESSING CONDITIONS**

Typical processing conditions for 319BJ are: Melt temperature: 230 - 260°C,

#### STORAGE AND HANDLING

Polyethylene resin 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 PE resin within 6 months after delivery.

## 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.

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