

Revision 20180214

# SABIC® LLDPE 218NJ

## LINEAR LOW DENSITY POLYETHYLENE

## DESCRIPTION

218NJ is a butene Linear Low Density Polyethylene TNPP free grade suitable for general purpose packaging. It is easy to process giving good tensile properties, impact strength and optical properties. 218NJ contains no slip and no antiblock additives.

## **TYPICAL APPLICATIONS**

Lamination film, thin liners, shopping bags, carrier bags, garbage bags, coextruded films, consumer packaging and other general-purpose applications.

# TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 190°C and 2.16 kg	2	g/10 min	ASTM D1238
Density	918	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Dart Impact Strength <sup>(1)</sup>	85	g/µm	ASTM D1709
OPTICAL PROPERTIES (1)			
Haze	13	%	ASTM D1003
Gloss			
at 60°	80	-	ASTM D2457
FILM PROPERTIES (1)			
Tensile Properties			
stress at break, MD	35	MPa	ASTM D882
stress at break, TD	29	MPa	ASTM D882
strain at break, MD	700	%	ASTM D882
strain at break, TD	750	%	ASTM D882
stress at yield, MD	12	MPa	ASTM D882
stress at yield, TD	10	MPa	ASTM D882
1% secant modulus, MD	220	MPa	ASTM D882
1% secant modulus, TD	260	MPa	ASTM D882
Puncture resistance	63	J/m	SABIC method
Elmendorf Tear Strength			
MD	130	g	ASTM D1922

# CHEMISTRY THAT MATTERS



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
TD	320	g	ASTM D1922
THERMAL PROPERTIES			
Vicat Softening Temperature	98	°C	ASTM D1525

(1) Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218NJ.

## **PROCESSING CONDITIONS**

Typical processing conditions for 218NJ are: Melt temperature: 185 - 205°C, Blow up ratio: 2.0 - 3.0



#### HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

218NJ resin is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

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

#### 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.

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