

# 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

Revision 20180214

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate</b>			
at 190°C and 2.16 kg	2	g/10 min	ASTM D1238
<b>Density</b>	918	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>Dart Impact Strength</b> <sup>(1)</sup>	85	g/μm	ASTM D1709
<b>OPTICAL PROPERTIES</b> <sup>(1)</sup>			
<b>Haze</b>	13	%	ASTM D1003
<b>Gloss</b>			
at 60°	80	-	ASTM D2457
<b>FILM PROPERTIES</b> <sup>(1)</sup>			
<b>Tensile Properties</b>			
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
<b>Puncture resistance</b>	63	J/m	SABIC method
<b>Elmendorf Tear Strength</b>			
MD	130	g	ASTM D1922

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.

## 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.