

SABIC® LLDPE 218NJ

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

218NJA 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 (MFR) | | | |
| at 190°C and 2.16 kg | 2 | g/10 min | ASTM D1238 |
| Density | 918 | kg/m³ | ASTM D1505 |
| MECHANICAL PROPERTIES | | | |
| Dart Impact Strength | 85 | g/µm | ASTM D1709 |
| OPTICAL PROPERTIES | | | |
| Haze | 13 | % | ASTM D1003 |
| Gloss | | | |
| at 45° | 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 |
| Elmendorf Tear Strength | | | |
| MD | 130 | g | ASTM D1922 |
| TD | 320 | g | ASTM D1922 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature | 98 | °C | ASTM D1525 |

⁽¹⁾ Mechanical properties have been measured by producing 30 μ 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