

# SABIC® LLDPE 118NJ

# LINEAR LOW DENSITY POLYETHYLENE

### **DESCRIPTION**

SABIC® LLDPE 118NJ is a butene linear low density polyethyleneresin typically used for general purpose applications. Films produced from this resin are tough with good puncture resistance, high tensile strength and good hot tack properties. 118NJ is TNPP free and it does not contain slip and antiblock additive.

#### **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                     | 918            | kg/m³  | ASTM D1505   |
| Melt Flow Rate (MFR)        |                |        |              |
| at 190 °C and 2.16 kg       | 1.0            | dg/min | ISO 1133     |
| OPTICAL PROPERTIES (1)      |                |        |              |
| Haze (1)                    | 13             | %      | ASTM D1003   |
| Gloss (45°)                 | 50             | ‰      | ASTM D2457   |
| FILM PROPERTIES (1)         |                |        |              |
| Tear strength MD            | 40             | kN/m   | ISO 6383-2   |
| Tensile test film           |                |        |              |
| Modulus of elasticity MD    | 160            | MPa    | ISO 527-3    |
| Stress at break TD          | 30             | MPa    | ISO 527-3    |
| Strain at break MD          | 700            | %      | ISO 527-3    |
| Strain at break TD          | 850            | %      | ISO 527-3    |
| Stress at break MD          | 37             | MPa    | ISO 527-3    |
| Modulus of elasticity TD    | 180            | MPa    | ISO 527-3    |
| Yield stress TD             | 11             | MPa    | ISO 527-3    |
| Tear strength TD            | 120            | kN/m   | ISO 6383-2   |
| Impact strength             | 22             | kJ/m   | ASTM D4272   |
| THERMAL PROPERTIES          |                |        |              |
| Vicat Softening Temperature |                |        |              |
| at 10 N (VST/A)             | 100            | °C     | ISO 306      |
| DSC test                    |                |        |              |
| melting point               | 121            | °C     | SABIC method |

<sup>(1)</sup> Properties have been measured by producing 30  $\mu m$  film with 2.5 BUR using 100% 118NJ.