



118 Series

Linear Low Density Polyethylene for Blown Film

Product Description

118 series resins are Linear Low Density Polyethylene grades suitable for general purpose packaging. Films produced using these resins gives good tensile properties, impact strength and optical properties.

118 Series includes following grades:

| | |
|----------|------------------------------------|
| 118N: | No Slip & No Antiblock |
| 118L: | 1000 ppm Slip & 2500 ppm Antiblock |
| 118Z: | 1000 ppm Slip & 3500 ppm Antiblock |
| 118W: | 1500 ppm Slip & 3500 ppm Antiblock |
| 118WS*: | 1400 ppm Slip & 2700 ppm Antiblock |
| 118WJ**: | 1500 ppm Slip & 3500 ppm Antiblock |

* - High Clarity grade, ** - TNPP Free Grade

Typical Applications

Lamination film, ice & frozen food bags, liners, carrier bags, garbage bags, coextruded films, consumer packaging etc.

Typical data

| Properties | Unit | Value ⁽¹⁾ | ASTM Method |
|--|-------------------|----------------------|------------------------|
| Resin Properties | | | |
| Melt Flow Rate @ 190°C & 2.16 kg load | g/10 min. | 1 | D 1238 |
| Density @ 23°C | kg/m ³ | 918 | D 1505 |
| Mechanical Properties⁽²⁾ | | | |
| Tensile Strength @ break, MD | MPa | 37 | D 882 |
| TD | | 30 | |
| Tensile Elongation @ break, MD | % | 650 | D 882 |
| TD | | 830 | |
| Tensile Strength @ yield, MD | MPa | 10 | D 882 |
| TD | | 9 | |
| 1% Secant Modulus, MD | MPa | 250 | D 882 |
| TD | | 270 | |
| Puncture Resistance | J/mm | 68 | SABIC Method D 1709 |
| Dart Impact Strength | g | 105 | |
| Elmendorf Tear Strength, MD | g | 160 | |
| TD | | 360 | D 1922 |
| Optical Properties⁽²⁾ | | | |
| Haze | % | 11 | D 1003 |
| Gloss @ 60° | - | 87 | D 2457 |
| Thermal Properties | | | |
| Vicat Softening Point | °C | 100 | D 1525 |

(1) Typical values; not to be construed as specification limits.

(2) Mechanical Properties have been measured by producing 30 µ film with 2.5 BUR using 100% 118N.

Processing Conditions

Typical processing conditions for 118 are:

Melt temperature: 195 - 215°C

Blow up ratio: 2 - 3

Food Regulation

118 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.

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 don't 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.