



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