

Producer: Saudi Basic Industries Corporation (Sabic) /Saudi Arabia

## SABIC® LLDPE 118N

### Description:

Linear low density polyethylene for Blown film.

**SABIC® LLDPE 118N** is a butene-linear low density polyethylene resin designed for general purpose applications. Films produced from this resin are tough with excellent puncture resistance, high tensile strength and good hottack properties.

### Typical Applications:

Typical applications for **SABIC® LLDPE 118N** are shipping sacks, ice bags, frozen food bags, liners, carrier bags, garbage bags, agriculture films, lamination and coextruded films for meatwrap, shrink film (for blending with LDPE), industrial consumer packaging and high clarity film if blended with (10-20%) LDPE.

### Film properties:

Film of 50 µm and BUR=2 has been produced on Kiefel IBC with 140 kg/h. Die size 200 mm, die gap 2,7 mm.

DESCRIPTION OF PROPERTIES	UNITS SI	VALUE <sup>(1)</sup>	TEST METHOD
<b>Polymer properties</b>			
Melt flow rate (MFR) at 190 °C and 2.16 kg	g/10 min	1.0	ISO 1133
Density	kg/m <sup>3</sup>	918	ISO 1183 (A)
<b>Formulation</b>			
Anti oxidant	mg/kg	+	SABIC method
<b>Optical properties</b>			
Gloss (45°)	%	50	ASTM D 2457
Haze	%	13	ASTM D 1003A
Clarity	mV	8	SABIC method
<b>Film properties</b>			
Impact strength	kJ/m	22	ASTM D 4272
Tear strength TD	kN/m	120	ISO 6383-2
Tear strength MD	kN/m	40	ISO 6383-2
Puncture resistance	J/m	630	SABIC method
Tensile test film			ISO 527-3
Yield stress TD	Mpa	11	
Yield stress MD	Mpa	11	
Stress at break TD	Mpa	30	
Stress at break MD	Mpa	37	
Strain at break TD	%	850	
Strain at break MD	%	700	
Modulus of elasticity TD	Mpa	180	
Modulus of elasticity MD	Mpa	160	
<b>Thermal properties</b>			
Vicat softening temperature at 10 N (VST/A)	°C	100	ISO 306/B
DSC test melting point	°C	121	SABIC method

<sup>(1)</sup> - Typical values should not be construed as specification limits.