

# SABIC® LLDPE 118WE

## LINEAR LOW DENSITY POLYETHYLENE

### DESCRIPTION

SABIC® LLDPE 118WE is a butene-linear low density polyethylene resin for general purpose applications. Films produced from this resin are tough with excellent puncture resistance, high tensile strength, good hottack properties and low gel levels. The resin contains anti block and slip agent.

#### Application

Typical applications for SABIC® LLDPE 118WE are shipping sacks, ice bags, frozen food bags, liners, carrier bags, garbage bags, agriculture films, lamination and coextruded films, 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.

The product mentioned

### TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate</b>			
at 190 °C and 2.16 kg	1.0	dg/min	ISO 1133
<b>Density<sup>(1)</sup></b>	918	kg/m <sup>3</sup>	ASTM D1505
<b>OPTICAL PROPERTIES</b>			
Gloss (45°)	42	%	ASTM D2457
Haze	20	%	ASTM D1003
Clarity	20	mV	SABIC method
<b>FILM PROPERTIES</b>			
Impact strength	22	kJ/m	ASTM D4272
Tear strength TD	120	kN/m	ISO 6383-2
Tear strength MD	40	kN/m	ISO 6383-2
Puncture resistance	380	J/m	SABIC method
<b>Tensile test film</b>			
Strain at break TD	800	%	ISO 527-3
Stress at break TD	30	MPa	ISO 527-3
Yield stress TD	11	MPa	ISO 527-3
Modulus of elasticity MD	160	MPa	ISO 527-3
Modulus of elasticity TD	180	MPa	ISO 527-3
Stress at break MD	37	MPa	ISO 527-3
Strain at break MD	600	%	ISO 527-3
<b>Coefficient of friction</b>	0.1	-	ASTM D1894
Blocking	15	g	SABIC method
Re-blocking	10	g	SABIC method
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature</b>			
at 10 N (VST/A)	101	°C	ISO 306
<b>DSC test</b>			
melting point	121	°C	SABIC method