

SABIC® LLDPE 118P

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE 118P is a butene linear low density polyethylene resin typically used for food applications. It contains an antioxidant inspired by nature offering advantages versus conventional stabilizers:

- Produced with no phosphorus or sulphur based additives
- Improved processing stability at a much reduced concentration
- No Specific Migration Limit (SML free)

Films produced from this resin typically have good puncture resistance, high tensile strength, good hot tack properties and low gel levels.

Typical applications for SABIC® LLDPE 118P are (frozen) food bags and lamination films.

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.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 190 °C and 2.16 kg	1.0	dg/min	ISO 1133
OPTICAL PROPERTIES			
Gloss (45°)	53	%	ASTM D2457
Haze	13	%	ASTM D1003
FILM PROPERTIES			
Impact strength	23	kJ/m	ASTM D4272
Tear strength TD	140	kN/m	ISO 6383-2
Tear strength MD	40	kN/m	ISO 6383-2
Puncture resistance	630	J/m	SABIC method
Tensile test film			
Yield stress TD	12	MPa	ISO 527-3
Yield stress MD	11	MPa	ISO 527-3
Stress at break TD	33	MPa	ISO 527-3
Stress at break MD	44	MPa	ISO 527-3
Strain at break TD	850	%	ISO 527-3
Strain at break MD	650	%	ISO 527-3
Modulus of elasticity TD	210	MPa	ISO 527-3
Modulus of elasticity MD	190	MPa	ISO 527-3
Coefficient of friction	1.2	-	ASTM D1894
Blocking	10	g	SABIC method
Re-blocking	65	g	SABIC method
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10N (VST/A)	103	°C	ISO 306
DSC test			
melting point	121	°C	ISO 11357-3