SABIC® LLDPE 118LJ

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

118LJ is a butene Linear Low Density Polyethylene TNPP free grade suitable for general-purpose blown films medium gauge. Films produced from these resins are tough with excellent puncture resistance, high tensile strength and good hot tack properties.

TYPICAL APPLICATIONS

Shipping sacks, ice bags, frozen food bags, stretch wrap film, produce bags, liners, carrier bags, garbage bags, agricultural films, laminated and coextruded films for meat wrap, frozen food and other food packaging, shrink film (for blending with LDPE), industrial consumer packaging, and high clarity film applications if blended with (10-20%) LDPE.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
190°C and 2.16 kg	1	g/10 min	ASTM D1238
Density	918	kg/m³	ASTM D1505
FORMULATION			
Slip agent	☑	-	-
Anti block agent	☑	-	-
MECHANICAL PROPERTIES			
Dart Impact Strength	145	g/µm	ASTM D1709
OPTICAL PROPERTIES			
Haze [(1)]	10	%	ASTM D1003
Gloss			
at 60°	60	-	ASTM D2457
FILM PROPERTIES			
Tensile Properties			
stress at break, MD	40	MPa	ASTM D882
stress at break, TD	32	MPa	ASTM D882
strain at break, MD	750	%	ASTM D882
strain at break, TD	800	%	ASTM D882
stress at yield, MD	11	MPa	ASTM D882
stress at yield, TD	12	MPa	ASTM D882
1% secant modulus, MD	220	MPa	ASTM D882
1% secant modulus, TD	260	MPa	ASTM D882
Puncture resistance	68	J/mm	SABIC method
Elmendorf Tear Strength			
MD	165	g	ASTM D1922
TD	300	g	ASTM D1922
THERMAL PROPERTIES			
Vicat Softening Temperature	100	°C	ASTM D1525

(1) Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118NJ.

PROCESSING CONDITIONS

Typical processing conditions for 118LJ are:

Melt temperature: 195°C - 215°C, Blow up ratio: 2.0 - 3.0

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 do not 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.