

SABIC® LLDPE 118WJ

LINEAR LOW DENSITY POLYETHYLENE
REGION ASIA

DESCRIPTION

SABIC® LLDPE 118WJ is a butene linear low density polyethylene resin typically used for general purpose applications. Films produced from this resin are tough with good puncture resistance, high tensile strength and good hottack properties. The resin contains slip and antiblock additive. SABIC® LLDPE 118WJ is TNPP free.
This product is not intended for and must not be used in any pharmaceutical/medical applications.

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

Revision 20220721

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 ⁽¹⁾	918	kg/m ³	ASTM D1505
FORMULATION			
Slip agent	☑	-	-
Anti block agent	☑	-	-
MECHANICAL PROPERTIES			
Dart Impact Strength ⁽²⁾	145	g/μm	ASTM D1709
OPTICAL PROPERTIES ⁽²⁾			
Haze	10	%	ASTM D1003
Gloss			
at 60°	60	-	ASTM D2457
FILM PROPERTIES ⁽²⁾			
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			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Vicat Softening Temperature	100	°C	ASTM D1525

(1) Base resin

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

PROCESSING CONDITIONS

Typical processing conditions for 118WJ are: Melt temperature: 195 - 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.

ENVIRONMENT AND RECYCLING

The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC Europe considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC Europe whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

DISCLAIMER

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