SABIC® LLDPE 118WJ

LINEAR LOW DENSITY POLYETHYLENE

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 20211108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	1.0	dg/min	ISO 1133
Density	918	kg/m³	ASTM D1505
OPTICAL PROPERTIES (1)			
Gloss (45°)	42	‰	ASTM D2457
Haze (1)	20	%	ASTM D1003
FILM PROPERTIES (1)			
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
Tensile test film			
Strain at break TD	800	%	ISO 527-3
Strain at break MD	600	%	ISO 527-3
Modulus of elasticity MD	160	MPa	ISO 527-3
Modulus of elasticity TD	180	MPa	ISO 527-3
Stress at break TD	30	MPa	ISO 527-3
Yield stress TD	11	MPa	ISO 527-3
Stress at break MD	37	MPa	ISO 527-3
Coefficient of friction	0.1	-	ASTM D1894
Blocking	15	g	SABIC method
Re-blocking	10	g	SABIC method
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST/A)	101	°C	ISO 306
DSC test			
melting point	121	°C	SABIC method

(1) 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