SABIC® LLDPE 118W

Linear low density polyethylene for Blown film

Description

SABIC® LLDPE 118W 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 and good hottack properties. The resin contains anti block and slip erucamide.

Application

Typical applications for SABIC® LLDPE 118W are shipping sacks, ice bags, frozen food bags, liners, carrier bags, garbage bags, films for meatwrap, 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.

Typical data. Revision 20060329

Properties	Units SI	Values	Test methods
Polymer properties			
Melt flow rate (MFR)			ISO 1133
at 190 °C and 2.16 kg	g/10 min	**1.0**	
Density	kg/m³	**918**	ISO 1183 (A)
Formulation			
Slip	mg/kg	**1500**	SABIC method
Anti block	mg/kg	**3500**	SABIC method
Anti oxidant	mg/kg	**+**	SABIC method
Optical properties			
Gloss (45°)	‰	**42**	ASTM D 2457
Haze	%	**20**	ASTM D 1003A
Clarity	mV	**20**	SABIC method
Film properties			
Impact strength	kJ/m	**22**	ASTM D 4272
Tear strength TD	kN/m	**120**	ISO 6383-2
Tear strength MD	kN/m	**40**	ISO 6383-2
Puncture resistance	J/m	**380**	SABIC method
Tensile test film			ISO 527-3
Yield stress TD	MPa	**11**	
Yield stress MD	MPa	**11**	
Stress at break TD	MPa	**30**	
Stress at break MD	MPa	**37**	
Strain at break TD	%	**800**	
Strain at break MD	%	**600**	
Modulus of elasticity TD	MPa	**180**	
Modulus of elasticity MD	MPa	**160**	
Coefficient of friction	-	**0.1**	ISO 8295
Blocking	g	**15**	SABIC method
Re-blocking	g	**10**	SABIC method
Thermal properties			
Vicat softening temperature			ISO 306/B
at 10 N (VST/A)	°C	**101**	
DSC test			SABIC method
melting point	°C	**121**	

internet www.SABIC-europe.com
email TCC.TM-PE@SABIC-europe.com

SABIC® LLDPE 118W

Linear low density polyethylene for Blown film

General information. SABIC Europe's assortment contains both butene and hexene grades for cast and blown film.
SABIC® LLDPE, produced by gasphase technology, is characterized by a high purity, an excellent extrusion performance and draw down capability. SABIC® LLDPE can be used in versatile mono an co-extrusion applications, pure or in blends with LDPE. SABIC® LLDPE is stabilized with an anti oxidant package suitable for all film applications.

Health, Safety and Food Contact regulations. Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available on the Internet (www.SABIC-europe.com). Additional specific information can be requested via your local Sales Office.

Quality. SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO 9001-2000. It is SABIC Europe's policy to supply materials that meet customers specifications and needs and to keep up its reputation as a pre-eminent, reliable supplier of e.g. polyethylenes.

Storage and handling. Polyethylenes resins (in pelletised or powder form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 50 °C. Not complying with these precautionary measures can lead to a degradation of the product which can result in colour changes, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletised or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

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.

internet www.SABIC-europe.com
email TCC.TM-PE@SABIC-europe.com