SUPEER™ MLLDPE 7118LE

METALLOCENE LLDPE

DESCRIPTION

SUPEER™ Metallocene Linear Low Density Polyethylene (mLLDPE) 7118LE is a metallocene ethylene-hexene copolymer. It has a good processability and performs well in a wide range of general purpose and high performance blown film applications. Films produced with this grade offer good tensile and impact strength, puncture resistance and sealing properties.
The resin contains anti-block and slip agent.
SABIC® mLLDPE 7118LE is typically used for applications like heavy duty bags, agriculture film, stretch hood, lamination film, frozen bags.
Properties have been measured on blown film of 25 µm (mono layer) and BUR = 2.5
Typical processing conditions for SABIC® mLLDPE 7118LE: processing temperatures 180 - 230 °C.

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

TYPICAL PROPERTY VALUES

Revision 20241107

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	1.0	dg/min	ASTM D1238
Density	918	kg/m³	ASTM D792
OPTICAL PROPERTIES			
Haze	29	%	ASTM D1003
Gloss (45°)	25	‰	ASTM D2457
FILM PROPERTIES			
Dart Impact Strength			
Dart Impact F50	29	g/µm	ASTM D1709
Tear strength TD Elmendorf	23	g/µm	ASTM D1922
Tear strength MD Elmendorf	15	g/µm	ASTM D1922
Tensile test film			
Protrusion puncture resistance	25	N	ASTM D5748-95
Tensile modulus MD	300	MPa	ASTM D882
Tensile modulus TD	310	MPa	ASTM D882
Tensile strength MD	45	MPa	ASTM D882
Tensile strength TD	40	MPa	ASTM D882
Elongation at break MD	510	%	ASTM D882
Elongation at break TD	610	%	ASTM D882
THERMAL PROPERTIES			
DSC test			
melting pointASTM D3418	124	°C	ASTM D3418
Vicat Softening Temperature			
at 10 N (VST/A)	107	°C	ISO 306

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.

DISCLAIMER