SABIC® LLDPE 6135NE

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE 6135NE is a hexene linear low medium density polyethylene resin. Films made from this resin exhibit a good balance between mechanical properties (like impact strength, tear strength) and optical properties on the one hand and stiffness on the other hand.
Typical applications for SABIC® LLDPE 6135NE are stand-up pouches, lamination films, surface protection film, MDO film and other applications requiring a balance between high impact strength, tear resistance and stiffness. The grade is typically used for multi-layer structures.

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

TYPICAL PROPERTY VALUES

Revision 20230421

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	936	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Dart Impact Strength	1.9	g/µm	ASTM D1709
OPTICAL PROPERTIES (1)			
Haze	22	%	ASTM D1003
FILM PROPERTIES (1)			
Tear strength MD Elmendorf	2	g/µm	ASTM D1922
Tear strength TD Elmendorf	22	g/µm	ASTM D1922
Tensile test film			
Strain at break TD	700	%	ASTM D882
Strain at break MD	605	%	ASTM D882
Stress at break TD	30	MPa	ASTM D882
Yield stress TD	19	MPa	ASTM D882
Yield stress MD	18	MPa	ASTM D882
Stress at break MD	57	MPa	ASTM D882
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST/A)	120	°C	ISO 306
DSC test			
melting point	126	°C	SABIC method

(1) Properties measured on blown film of 25 µm and BUR = 2.5

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