SABIC® LLDPE 219NJ

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE 219NJ is a butene linear low density polyethylene resin produced using solution technology, 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 does not contain slip or antiblock additive. SABIC® LLDPE 219NJ 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 20220809

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Density			
Density [1]	0.918	g/cm³	ASTM D792
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	2.0	g/10 min	ASTM D1238
OPTICAL PROPERTIES [2]			
Gloss			
Gloss (45°)	149	-	ASTM D2457
Haze [2]	0.55	%	ASTM D1003
FILM PROPERTIES [2]			
Dart Impact Strength			
Dart Drop Impact	63	g	ASTM D1709
Elmendorf Tear Strength			
Tear Strength, MD	35	g	ASTM D1922
Tear Strength, TD	370	g	ASTM D1922
Tensile test film			
2% secant modulus, MD	149	MPa	ASTM D882
2% secant modulus, TD	147	MPa	ASTM D882
Stress @ Yield, MD	10.7	MPa	ASTM D882
Stress @ Yield, TD	8.96	MPa	ASTM D882
Stress @ Break, MD	39.6	MPa	ASTM D882
Stress @ Break, TD	20.6	MPa	ASTM D882
Strain @ Break, MD	568	%	ASTM D882
Strain @ Break, TD	670	%	ASTM D882
THERMAL PROPERTIES			
Vicat Softening Temperature	98	°C	ASTM D1525

(1) Base resin

(2) Fabrication Conditions are: Die Gap 20 mil(0.5 mm), Melt Temperatire 271 C, Line Speed: 183 m/min, Air Gap: 7.6 mm

PROCESSING CONDITIONS

Typical processing conditions for 219NJ 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