SABIC® LLDPE 218WJ

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

218WJ is a butene Linear Low Density Polyethylene TNPP free grade suitable for general-purpose packaging. It is easy to process giving good tensile properties, impact strength and optical properties. 218WJ contains slip and antiblock additives.

TYPICAL APPLICATIONS

Lamination film, thin liners, shopping bags, carrier bags, garbage bags, coextruded films, consumer packaging and other general-purpose applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	2	g/10 min	ASTM D1238
Density	918	kg/m³	ASTM D1505
FORMULATION			
Slip agent	☑	-	-
Anti block agent	☑	-	-
MECHANICAL PROPERTIES			
Dart Impact Strength (1)	85	g/µm	ASTM D1709
OPTICAL PROPERTIES (1)			
Haze	13	%	ASTM D1003
Gloss			
at 60°	80	-	ASTM D2457
FILM PROPERTIES (1)			
Tensile Properties			
stress at break, MD	35	MPa	ASTM D882
stress at break, TD	29	MPa	ASTM D882
strain at break, MD	700	%	ASTM D882
strain at break, TD	750	%	ASTM D882
stress at yield, MD	12	MPa	ASTM D882
stress at yield, TD	10	MPa	ASTM D882
1% secant modulus, MD	220	MPa	ASTM D882
1% secant modulus, TD	260	MPa	ASTM D882
Elmendorf Tear Strength			
MD	130	g	ASTM D1922
TD	320	g	ASTM D1922
THERMAL PROPERTIES			
Vicat Softening Point	98	°C	ASTM D1525

(1) Mechanical properties have been measured by producing 30 µ film with 2.5 BUR using 100% 218NJ.

PROCESSING CONDITIONS

Typical processing conditions for 218WJ are:
Melt temperature: 185 - 205°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.