

SABIC® LLDPE 218NF

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

218NF is a butene-1 copolymerized linear low density polyethylene intended for films without anti-block and slip agent. It has excellent processing ability, good tensile properties, impact strength and optical properties.

TYPICAL PROPERTY VALUES

Revision 20260625

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Density	0.918	g/cm ³	ASTM D792
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
@ 190°C & 2.16 kg load	2.0	g/10 min	ASTM D1238
MECHANICAL PROPERTIES ⁽¹⁾			
Dart Impact Strength ⁽²⁾	77	g	ASTM D1709
OPTICAL PROPERTIES ⁽¹⁾			
Haze	13.8	%	ASTM D1003
Gloss (45°)	46.8	‰	ASTM D2457
FILM PROPERTIES ⁽¹⁾			
Tear strength MD Elmendorf	6.6	g/μm	ASTM D1922
Tear strength TD Elmendorf	9.1	g/μm	ASTM D1922
Tensile test film ⁽¹⁾			
Strength at break, MD	38	MPa	ASTM D882
Strength at break, TD	35	MPa	ASTM D882
Elongation at break, MD	715	%	ASTM D882
Elongation at break, TD	751	%	ASTM D882
Secant modulus (1%), MD	283	MPa	ASTM D882
Secant modulus (1%), TD	330	MPa	ASTM D882
THERMAL PROPERTIES			
Melting point	122	°C	SABIC method

(1) Properties have been measured by producing 30 μm 100% pure blown film with BUR 2.0.

(2) method A

STORAGE AND HANDLING

The 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 that 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.

PROCESSING CONDITIONS

Typical processing conditions for SABIC® 218NF are: Die gap: 2 mm, Melt temperature: 200°C.



APPLICATIONS

Typical applications include agriculture films, liners, laminated and coextruded films, stretch films and compounding.

MEDICAL & FOOD REGULATION

The grades are not intended for and must not be used in any pharmaceutical / medical applications.

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