

SABIC® LDPE HP0323NN

LOW DENSITY POLYETHYLENE

DESCRIPTION

HP0323NN is a Low Density Polyethylene grade suitable for producing heavy-duty films. It gives outstanding toughness and optical properties in the film. It contains no slip, no antiblock and no antioxidant additives.

TYPICAL APPLICATIONS

HP0323NN can be used for Heavy-duty bags, industrial shrink films, construction and agricultural films.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	0.30	g/10 min	ASTM D1238
Density			
at 23°C	923	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Dart Impact Strength ⁽¹⁾	2	g/μm	ASTM D1709
OPTICAL PROPERTIES ⁽¹⁾			
Haze	15	%	ASTM D1003
Gloss			
at 45°	38	%	ASTM D2457
FILM PROPERTIES ⁽¹⁾			
Tensile Properties			
stress at break, MD	32	MPa	ASTM D882
stress at break, TD	30	MPa	ASTM D882
strain at break, MD	235	%	ASTM D882
strain at break, TD	570	%	ASTM D882
stress at yield, MD	12	MPa	ASTM D882
stress at yield, TD	12	MPa	ASTM D882
1% secant modulus, MD	200	MPa	ASTM D882
1% secant modulus, TD	260	MPa	ASTM D882
Tear Resistance			
MD	2.4	g/μm	ASTM D1922
TD	3	g/μm	ASTM D1922
THERMAL PROPERTIES			
Vicat Softening Temperature	95	°C	ASTM D1525

(1) Properties have been measured by producing 50 μm film with 2.5 BUR using 100% HP0323NN.

PROCESSING CONDITIONS

Typical processing conditions for HP0323NN are:

Barrel temperature: 180 - 195°C

Blow up ratio: 2.0 – 4.0

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.