SABIC® LDPE HP0322NN

LOW DENSITY POLYETHYLENE

DESCRIPTION

HP0322NN is a Low Density Polyethylene grade suitable for producing heavy-duty films and does not contain slip, antiblock and antioxidant additives. It gives outstanding toughness and optical properties in the film.

TYPICAL APPLICATIONS

HP0322NN can be used for Heavy-duty bags, industrial shrink films, construction and agricultural films.

TYPICAL PROPERTY VALUES

Revision 20201103

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16kg	0.33	g/10 min	ASTM D1238
Density			
at 23°C	922	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Dart Impact Strength	4	g/µm	ASTM D1709
OPTICAL PROPERTIES			
Haze (1)	11	%	ASTM D1003
Gloss			
at 45°	50	-	ASTM D2457
FILM PROPERTIES			
Tensile Properties			
stress at break, MD	31	MPa	ASTM D882
stress at break, TD	30	MPa	ASTM D882
strain at break, MD	450	%	ASTM D882
strain at break, TD	690	%	ASTM D882
stress at yield, MD	11	MPa	ASTM D882
stress at yield, TD	10	MPa	ASTM D882
1% secant modulus, MD	190	MPa	ASTM D882
1% secant modulus, TD	210	MPa	ASTM D882
Tear Resistance			
MD	8	g/µm	ASTM D1922
TD	6	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% HP0322NN.

PROCESSING CONDITIONS

Typical processing conditions for HP0322NN 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.

DISCLAIMER