SABIC® LDPE HP4024WN

LOW DENSITY POLYETHYLENE

DESCRIPTION

HP4024WN is a Low Density Polyethylene grade suitable for producing general-purpose films and it gives excellent processability and optical properties with good mechanical properties. HP4024WN contains slip and antiblock additives.

TYPICAL APPLICATIONS

HP4024WN can be used for high clarity laundry bags, textile wrapping films, produce bags, zip lock bags and master batch.

TYPICAL PROPERTY VALUES

Revision 20190205

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 190°C and 2.16 kg	4.0	g/10 min	ASTM D1238
Density			
at 23°C	923	kg/m³	ASTM D1505
FORMULATION			
Slip agent	☑	-	-
Anti block agent	☑	-	-
MECHANICAL PROPERTIES			
Dart Impact Strength (1)	2	g/µm	ASTM D1709
OPTICAL PROPERTIES (1)			
Haze	6	%	ASTM D1003
Gloss			
at 45°	68	%	ASTM D2457
FILM PROPERTIES (1)			
Tensile Properties			
stress at break, MD	32	MPa	ASTM D882
stress at break, TD	24	MPa	ASTM D882
strain at break, MD	265	%	ASTM D882
strain at break, TD	600	%	ASTM D882
stress at yield, MD	10	MPa	ASTM D882
stress at yield, TD	10	MPa	ASTM D882
1% secant modulus, MD	277	MPa	ASTM D882
1% secant modulus, TD	224	MPa	ASTM D882
Tear Resistance			
MD	10	g/µm	ASTM D1922
TD	14	g/µm	ASTM D1922
THERMAL PROPERTIES			
Vicat Softening Temperature	92	°C	ASTM D1525

(1) Properties have been measured by producing 30 µm film with 2.5 BUR using 100% HP4024WN.

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PROCESSING CONDITIONS

Typical processing conditions for HP4024WN are:

Barrel temperature: 160 - 190°C, Blow up ratio: 2.0 – 3.0

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, Additional specific information can be requested via your local Sales Office.

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical/medical applications.

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.

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