

SABIC® LDPE HP4025ZN

LOW DENSITY POLYETHYLENE

DESCRIPTION

LDPE HP4025ZN Low Density Polyethylene Resin can be readily extruded using conventional blown film techniques utilizing melt temperatures between 150°C and 170°C. LDPE HP4025ZN, when properly fabricated, shows good mechanical properties and high optical properties. It shows very good drawdown properties and excellent processability. This product contains slip and antiblock additives

TYPICAL APPLICATIONS

Light produce bags.
Soft goods packaging.
Textile packaging.
High clarity applications.

TYPICAL PROPERTY VALUES

Revision 20210627

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
at 190°C and 2.16kg	3.5	g/10 min	ISO 1133
Density			
at 23°C	0.923	g/cm ³	ASTM D792
MECHANICAL PROPERTIES ⁽²⁾			
Dart Impact Strength			
	2	g/μm	ASTM D1709
OPTICAL PROPERTIES			
Haze			
	7	%	ASTM D1003
*Gloss			
Gloss (45°)	65	-	ASTM D2457
FILM PROPERTIES ⁽²⁾			
Tensile Properties			
1% secant modulus, MD	190	MPa	ASTM D882
1% secant modulus, TD	175	MPa	ASTM D882
stress at yield, MD	11	MPa	ASTM D882
stress at yield, TD	12	MPa	ASTM D882
stress at break, MD	32	MPa	ASTM D882
stress at break, TD	25	MPa	ASTM D882
strain at break, MD	300	%	ASTM D882
strain at break, TD	600	%	ASTM D882
Elmendorf Tear Strength ⁽²⁾			
MD	12	g/μm	ASTM D1922
TD	14	g/μm	ASTM D1922
THERMAL PROPERTIES			
Vicat Softening Point			
	93	°C	ASTM D1525

(1) Include test thickness: Properties have been measured by producing 50 μ film with 2.5 BUR using 100%

(2) These are typical properties and are not to be construed as specification

PROCESSING CONDITIONS

Typical processing conditions for LDPE HP4025ZN are:

Barrel temperature: 160- 175°C, Blow up ratio: 2.5:1

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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