SABIC® LDPE HP2025JN

LOW DENSITY POLYETHYLENE

DESCRIPTION

LDPE HP2025JN Low Density Polyethylene Resin is a high clarity resin designed for clarity over wraps applications. When properly fabricated, LDPE HP2025JN displays: excellent processability and drawdown; very good toughness and draw down; superior optical properties; and excellent tensile and tear strength. It can be readily extruded using conventional blown film techniques utilizing melt temperatures between 160 and 175 0C. HP2025JN Contains Slip and antiblock additives. LDPE HP2025JN grade has very low level of gels.

TYPICAL APPLICATIONS

- Light-produce bags.
- Soft goods packaging.
- Textile packaging.
- Good optical general purpose bags.
- Hygiene films.
- Food packaging films.

TYPICAL PROPERTY VALUES

Revision 20221026

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES [1]			
Melt Flow Rate (MFR)			
at 190°C and 2.16kg	2.00	g/10 min	ISO 1133
Density			
at 23°C	.925	g/cm³	ASTM D792
MECHANICAL PROPERTIES [2]			
Dart Impact Strength	110	g	ASTM D1709
Dart Impact Strength	2	g/µm	ASTM D1709
OPTICAL PROPERTIES [1] [2]			
Haze	8	%	ASTM D1003
***Gloss**			
Gloss (45°)	55	-	ASTM D2457
FILM PROPERTIES [1] [2]			
Tensile Properties			
1% secant modulus, MD	190	MPa	ASTM D882
1% secant modulus, TD	210	MPa	ASTM D882
stress at yield, MD	12	MPa	ASTM D882
stress at yield, TD	12	MPa	ASTM D882
stress at break, MD	22.0	MPa	ASTM D882
stress at break, TD	20.0	MPa	ASTM D882
strain at break, MD	450	%	ASTM D882
strain at break, TD	350	%	ASTM D882
Elmendorf Tear Strength [1] [2]			
MD	16	g/µm	ASTM D1922
TD	11	g/µm	ASTM D1922
THERMAL PROPERTIES			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Vicat Softening Point	96.0	°C	ASTM D1525

(1) Properties have been measured by producing 50 µ film with 2.5 BUR using 100%
(2) Typical values: not to be construed as specification limits.

PROCESSING CONDITIONS

Typical processing conditions for LDPE HP2025NN 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.

DISCLAIMER