

POLYMERS

SABIC[®] LDPE

HP4027J

Low Density Polyethylene for Blown Film
(Provisional Datasheet)

PRODUCT DESCRIPTION:

SABIC[®] LDPE HP4027J is a Low Density Polyethylene grade formulated with slip agent and anti-block additives, with increased density. It typically exhibits excellent draw down ability with higher output. Films typically exhibit good optics, low friction, low blocking and high rigidity.

Erucamide : 700 ppm
Natural Silica : 1000 ppm

TYPICAL APPLICATIONS:

Thin film for textile packaging, high clarity laundry bags, bread bags, general purpose film for high speed automatic packaging lines. This grade is typically suitable where higher stiffness and down gauging are required.

This product is not intended for use in medical and pharmaceutical applications.

TYPICAL PROPERTY VALUES:

PROPERTIES	Unit	Value ⁽¹⁾	Test Method
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	4	ISO 1133
Density @ 23°C	kg/m ³	927	ISO 1183
THERMAL PROPERTIES			
Vicat Softening Temperature (A50 (50°C/h 10N))	°C	92.0	ISO 306
Melting Temperature	°C	111	ISO 3146
FILM MECHANICAL PROPERTIES ⁽²⁾			
Tensile Stress @ Yield	MPa	13	ISO 527, -2
Tensile Stress @ Break (MD)	MPa	20	ISO 527, -3
Tensile Stress @ Break (TD)	MPa	15	ISO 527, -3
Tensile Strain @ Break (MD)	%	300	ISO 527, -3
Tensile Strain @ Break (TD)	%	550	ISO 527, -3
Tensile Modulus	MPa	300	ISO 527, -2
Dart Drop Impact	g	90	ASTM D 1709
Coefficient of Friction	%	< 20	ISO 8295
FILM OPTICAL PROPERTIES ⁽²⁾			
Haze	%	< 8	D 1003
Gloss (20°)	%	>70	D 2457
Gloss (60°)	%	>110	D 2457

(1) Typical values; not to be construed as specifications

(2) Measured on 50 micron thickness blown film extruded at melt temperature of 170°C with BUR of 2.5

PROCESSING CONDITIONS:

Typical processing conditions for HP4027J are:

Melt temperature : 150 - 190°C

Blow up ratio : 2 - 3

Recommended thickness : 15 - 40 micron

FOOD REGULATION

SABIC® LDPE HP4027J resins are suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

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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