

POLYMERS

# SABIC<sup>®</sup> LDPE

## HP2023 Series

Low Density Polyethylene for Blown Film

Revision Date Jan, 2016

### PRODUCT DESCRIPTION:

HP2023 series resins are Low Density Polyethylene grades suitable for general-purpose packaging. They exhibit better draw down, good optical and mechanical properties.

GRADE	SLIP (PPM)	Antiblock (PPM)	ANTIOXIDANT AVAILABILITY
HP2023N	None	None	Yes
HP2023NN	None	None	No
HP2023J	500	1000	Yes
HP2023JN	500	1000	No

### TYPICAL APPLICATIONS:

Thin shrink film, lamination film, produce bags, textile packaging, soft goods packaging, general-purpose bags with good optics and t-shirts carrier bags.

### TYPICAL PROPERTY VALUES:

RESIN PROPERTIES	UNIT	VALUE <sup>(1)</sup>	ASTM TEST METHOD
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	2.0	D 1238
Density @ 23°C	kg/m <sup>3</sup>	923	D 1505
<b>MECHANICAL PROPERTIES <sup>(2)</sup></b>			
Tensile Strength @ break, MD	MPa	20	D 882
TD		15	
Tensile Elongation @ break, MD	%	300	D 882
TD		588	
Tensile Strength @ yield, MD	MPa	12	D 882
TD		12	
1% Secant Modulus, MD	MPa	235	D 882
TD		271	
Dart Impact Strength	g/ micron	2	D 1709
Tear Resistance, MD	g/ micron	15	D 1922
TD	g/ micron	11	
<b>OPTICAL PROPERTIES <sup>(2)</sup></b>			
Haze	%	8	D 1003
Gloss @ 45°	-	61	D 2457
<b>THERMAL PROPERTIES</b>			
Vicat Softening Point	°C	92	D 1525

(1) Typical values; not to be construed as specification limits.

(2) Properties have been measured by producing 30 µ film with 2.5 BUR using 100% HP2023N.

## PROCESSING CONDITIONS:

Typical processing conditions for HP2023N 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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