

SABIC® LDPE HP0830NN

LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HP0830N is Low Density Polyethylene grade of medium density with improved stiffness and excellent optical properties. It typically exhibits good melt strength with good draw down ability. Films typically exhibit good toughness and good biaxial shrink properties.

TYPICAL APPLICATIONS

Shrink film, thin industrial film, thin packaging film, bags & pouches.

TYPICAL PROPERTY VALUES

Revision 20210715

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	0.8	g/10 min	ASTM D1238
Density			
at 23°C	930	kg/m ³	ASTM D1505
OPTICAL PROPERTIES ⁽¹⁾			
Haze			
	8.5	%	ASTM D1003
Gloss			
at 45°	71	-	ASTM D2457
FILM PROPERTIES			
Tensile Properties ⁽¹⁾			
stress at break, MD	30	MPa	ASTM D882
stress at break, TD	27	MPa	ASTM D882
strain at break, MD	300	%	ASTM D882
strain at break, TD	500	%	ASTM D882
stress at yield, MD	13	MPa	ASTM D882
stress at yield, TD	13	MPa	ASTM D882
1% secant modulus, MD	350	MPa	ASTM D882
1% secant modulus, TD	550	MPa	ASTM D882
dart impact strength	2	g/μm	ASTM D1709
puncture resistance	2.5	g/μm	SABIC method
Tear Resistance ⁽¹⁾			
MD	8	g/μm	ASTM D1922
TD	8	g/μm	ASTM D1922
THERMAL PROPERTIES			
Vicat Softening Temperature	100	°C	ASTM D1525

(1) Properties have been measured by producing 50 μm film with 2.5 BUR using 100% HP0830NN.

PROCESSING CONDITIONS

Typical molding conditions for HP0830NN are:

Melt temperature: 170°C – 185°C

Blow up ratio: 2.0 – 4.0

FOOD REGULATION

SABIC® LDPE HP0830 is 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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