

# SABIC® LDPE HP0823NN

## LOW DENSITY POLYETHYLENE

### DESCRIPTION

HP0823NN is a Low Density Polyethylene grade formulated with no slip and no antiblock and no antioxidant additives. 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, bag & pouches. This grade enables high speed converting without sticking.

### TYPICAL PROPERTY VALUES

Revision 20201102

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
at 190°C and 2.16 kg	0.80	g/10 min	ASTM D1238
<b>Density</b>			
at 23°C	923	kg/m <sup>3</sup>	ASTM D1505
<b>OPTICAL PROPERTIES <sup>(1)</sup></b>			
<b>Haze</b>	10	%	ASTM D1003
<b>Gloss</b>			
at 45°	55	%	ASTM D2457
<b>FILM PROPERTIES <sup>(1)</sup></b>			
<b>Tensile Properties</b>			
stress at break, MD	29	MPa	ASTM D882
stress at break, TD	25	MPa	ASTM D882
strain at break, MD	240	%	ASTM D882
strain at break, TD	650	%	ASTM D882
stress at yield, MD	12	MPa	ASTM D882
stress at yield, TD	12	MPa	ASTM D882
1% secant modulus, MD	208	MPa	ASTM D882
1% secant modulus, TD	310	MPa	ASTM D882
<b>Tear Resistance</b>			
MD	10	g/μm	ASTM D1922
TD	6	g/μm	ASTM D1922
<b>Dart Impact F50</b>	2	g	ASTM D1709
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature</b>	95	°C	ASTM D1525

(1) Properties have been measured by producing 50 μm film with 2.5 BUR using 100% HP0823NN.

### PROCESSING CONDITIONS

Typical processing conditions for HP0823NN are:  
Barrel temperature: 170 - 185°C, Blow up ratio: 2.0 – 4.0



## 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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