

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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	0.80	g/10 min	ASTM D1238
Density			
at 23°C	923	kg/m ³	ASTM D1505
OPTICAL PROPERTIES ⁽¹⁾			
Haze	10	%	ASTM D1003
Gloss			
at 45°	55	%	ASTM D2457
FILM PROPERTIES ⁽¹⁾			
Tensile Properties			
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
Tear Resistance			
MD	10	g/μm	ASTM D1922
TD	6	g/μm	ASTM D1922
Dart Impact F50	2	g	ASTM D1709
THERMAL PROPERTIES			
Vicat Softening Temperature	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