

SABIC® LDPE HP0830NN

LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HP0830NN 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/m³	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.

© 2026 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



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 contacts 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.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

