

SABIC® HDPE BX0353

HIGH DENSITY POLYETHYLENE - PROVISIONAL DATASHEET

DESCRIPTION

SABIC® HDPE BX0353 is high density Polyethylene typically used for production of biaxial oriented polyethylene (BOPE) via tenter frame technology. The grade shows excellent stiffness, good stretchability, excellent heat resistance to facilitate designing of PE monomaterial structures.

TYPICAL APPLICATIONS

Lamination films for food and nonfood packaging. The grade can also be tested in MDO film application.

TYPICAL PROPERTY VALUES

Revision 20240221

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Density	953	kg/m ³	ASTM D1505
Melt Flow Rate (MFR) at 190°C and 2.16 kg	1.1	g/10 min	ASTM D1238
MECHANICAL PROPERTIES			
Puncture Resistance	0.95	J	SABIC method
FILM PROPERTIES ⁽¹⁾			
Elmendorf Tear Strength			
MD	18	g	ASTM D1922
TD	260	g	ASTM D1922
Tensile Properties			
stress at break, MD	38	MPa	ASTM D882
stress at break, TD	29	MPa	ASTM D882
strain at break, MD	695	%	ASTM D882
strain at break, TD	300	%	ASTM D882
stress at yield, MD	25	MPa	ASTM D882
stress at yield, TD	26	MPa	ASTM D882
1% secant modulus, MD	700	MPa	ASTM D882
1% secant modulus, TD	850	MPa	ASTM D882
THERMAL PROPERTIES			
Vicat Softening Temperature	123	°C	ASTM D1525
DSC test			
Melting Point	131	°C	ASTM D3418

(1) Properties have been measured by producing 25 µm blown film with 2.5 BUR using 100% BX0353 @ melt temperature 210-230 °C.

PROCESSING CONDITIONS

Typical processing conditions for BX0353 are:
Melt temperature: 210 - 250°C.



FOOD REGULATION

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available on the Internet (www.SABIC.com). 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.

DISCLAIMER

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