

SABIC® HDPE FJ01552

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE FJ01552 is a TNPP free grade. It is a medium molecular weight High Density Polyethylene designed for blown film extrusion. It has a broad molecular weight with excellent extrudability. The design of the product, molecular architecture and density, gives it a unique combination of easy extrusion and strong physical properties which makes it suitable for producing thin films with excellent strength and rigidity.

TYPICAL APPLICATIONS

SABIC® HDPE FJ01552 resin is recommended for the production of strong millinery and notion bags, deep freeze bags, table cloths and thin film as quality replacement for paper products.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	0.15	g/10 min	ISO 1133
at 190 °C and 21.6 kg	16	g/10 min	ISO 1133
Density	952	kg/m ³	ASTM D1505
FILM PROPERTIES			
Tensile Properties ⁽¹⁾			
stress at break, MD	55	MPa	ASTM D882
stress at break, TD	49	MPa	ASTM D882
strain at break, MD	400	%	ASTM D882
strain at break, TD	610	%	ASTM D882
stress at yield, MD	31	MPa	ASTM D882
stress at yield, TD	30	MPa	ASTM D882
1% secant modulus, MD	1400	MPa	ASTM D882
1% secant modulus, TD	1700	MPa	ASTM D882
Elmendorf Tear Strength			
MD	4	g	ASTM D1922
TD	40	g	ASTM D1922
Dart Impact Strength			
F50	180	g	ASTM D1709
THERMAL PROPERTIES			
Vicat Softening Temperature	125	°C	ASTM D1525

(1) Properties are based on 15 µm film produced at a BUR of 4 using 100% FJ01552.

PROCESSING CONDITIONS

SABIC® HDPE FJ0155 can be extruded on conventional HMW-HDPE equipment at melt temperatures between 200 and 235°C.

Other typical processing conditions:

Frost line Height: 6-8 times die Ø

BUR: 3-5