

SABIC® HDPE FJ00952

HIGH DENSITY POLYETHYLENE

DESCRIPTION

FJ00952 is TNPP additive free grade, high molecular weight High Density Polyethylene copolymer which has a broad molecular weight distribution. The design of the product, molecular architecture and density, gives it a unique combination of easy extrusion and high melt strength with strong physical properties which makes it suitable for producing thin films with excellent strength and rigidity.

TYPICAL APPLICATIONS

FJ00952 resin is recommended for blown film extrusion. This product is suggested for the manufacture of high strength grocery sacks, shopping bags and high quality thin films for multi wall sack liners and replacement for thin paper products. Films of this product can be readily treated and printed to give high quality graphics.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	0.05	g/10 min	ASTM D1238
at 190°C and 21.6 kg	9	g/10 min	ASTM D1238
Density			
at 23°C	952	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Dart Impact Strength ⁽¹⁾	180	g/μm	ASTM D1709
FILM PROPERTIES ⁽¹⁾			
Tensile Properties			
stress at break, MD	60	MPa	ASTM D882
stress at break, TD	56	MPa	ASTM D882
strain at break, MD	400	%	ASTM D882
strain at break, TD	550	%	ASTM D882
stress at yield, MD	33	MPa	ASTM D882
stress at yield, TD	31	MPa	ASTM D882
1% secant modulus, MD	1250	MPa	ASTM D882
1% secant modulus, TD	1500	MPa	ASTM D882
Elmendorf Tear Strength			
MD	12	g	ASTM D1525
TD	60	g	ASTM D1525
THERMAL PROPERTIES			
Vicat Softening Temperature	125	°C	ASTM D1525

(1) Properties are based on 15 μm film produced at 4 BUR using 100% FJ00952.