

SABIC® HDPE F00952

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE F00952 resin is a high molecular weight High Density Polyethylene copolymer which has been designed specifically for blown film extrusion. It has broad molecular distribution and high density combine successfully to give excellent extrudability with high film strength and rigidity. The material contains anti oxidant. Application SABIC® HDPE F00952 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 are readily treated and printed to give high quality graphics. Processing conditions SABIC® HDPE F00952 can be extruded on conventional HMW-HDPE equipment at melt temperatures between 200 and 235 °C. Film properties Film properties have been measured at 15 µm blown film with a BUR = 4.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR) ⁽¹⁾ at 190 °C and 2.16 kg ⁽¹⁾	0.05	dg/min	ISO 1133
at 190 °C and 21.6 kg	9	dg/min	ISO 1133
Density	952	kg/m ³	ASTM D1505
FILM PROPERTIES			
Dart Impact F50 ⁽²⁾	180	g	ASTM D1709
Tear strength TD Elmendorf	60	g/µm	ASTM D1922
Tear strength MD Elmendorf	12	g/µm	ASTM D1922
Tensile test film			
Strain at break TD	550	%	ASTM D882
Strain at break MD	400	%	ASTM D882
Stress at break MD ⁽²⁾	60	MPa	ASTM D882
Stress at break TD	56	MPa	ASTM D882
Modulus of elasticity TD	1500	MPa	ASTM D882
Yield stress TD	31	MPa	ASTM D882
Yield stress MD	33	MPa	ASTM D882
Modulus of elasticity MD	1250	MPa	ASTM D882
THERMAL PROPERTIES			
Vicat Softening Temperature			
Vicat softening temperature	125	°C	ASTM D1525

(1) Typical values: not to be construed as specification limits.

(2) Properties are based on 15 µm film produced at 4 BUR using 100% F00952