

# SABIC® HDPE F01552

## HIGH DENSITY POLYETHYLENE

### DESCRIPTION

SABIC® HDPE F01552 is a medium molecular weight High Density Polyethylene specifically designed for blown film extrusion and can be used in tape and thin wall pipe extrusion. It has a broad molecular weight with excellent extrudability, high film strength and draw down characteristics. The material contains anti oxidant.

### TYPICAL APPLICATIONS

SABIC® HDPE F01552 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. The material is applicable for irrigation tapes and pipes.

### TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
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
<b>Density</b>	952	kg/m <sup>3</sup>	ASTM D1505
<b>FILM PROPERTIES</b>			
<b>Tensile Properties <sup>(1)</sup></b>			
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
<b>Elmendorf Tear Strength</b>			
MD	4	g	ASTM D1922
TD	40	g	ASTM D1922
<b>Dart Impact Strength</b>			
F50	180	g	ASTM D1709
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature</b>	125	°C	ASTM D1525

(1) Properties are based on 15 µm film produced at a BUR of 4 using 100% F01552.

### PROCESSING CONDITIONS

SABIC® HDPE F01552 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