

# SABIC® HDPE F01552

## HIGH DENSITY POLYETHYLENE

### DESCRIPTION

SABIC® HDPE F01552 is a medium molecular weight High Density Polyethylene specifically designed for blown film 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.

### TYPICAL PROPERTY VALUES

Revision 20180313

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate</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 F0155 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

## HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, Additional specific information can be requested via your local Sales Office.

## QUALITY

SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO 9001.

## ENVIRONMENT AND RECYCLING

The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC Europe considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC Europe whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

## STORAGE AND HANDLING

Polyethylene resins (in pelletised or powder form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. Not complying with these precautionary measures can lead to a degradation of the product which can result in colour changes, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletised or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

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