

Producer: Borouge Pte.Ltd / United Arab Emirates (UAE)

## HDPE FB1520

### DESCRIPTION

**Borstar®FB1520** is high density film grade produced using the proprietary **Borstar** bimodal technology combining superior physical properties with excellent process ability. The product gives a strong and stiff film with high consistency. Material properties are best realized by processing at HDPE conditions.

**Borstar®FB1520** contains antioxidant.

### APPLICATIONS

Mono layer & co-extrusion films	Exclusive Carrier/Boutique bags
Thin protection film	Thin bags
Heavy duty bags	Industrial Liners
Food packaging	

### SPECIAL FEATURES

Easy processability	Excellent draw down
Excellent impact strength – stiffness balance	Bubble stability

PROPERTY		TEST	UNIT	VALUE
Density		ASTM D792	Kg/m <sup>3</sup>	952
Melt Flow Rate MFR (190 °C/2.16 kg)		ASTM D1238	g/10min	<0.1
Melt Flow Rate MFR (190 °C/5.0 kg)		ASTM D1238	g/10min	0.25
Melt Flow Rate MFR (190 °C/21 kg)		ASTM D1238	g/10min	7
Melting Temp.		ISO 11357/03	°C	133
Vicat Softening Temperature A50 (10 N)		ISO 306	°C	129
ESCR – 10% Igepal / F50		ASTM D 1693	Hours	>1000
Tensile Strength at Break	MD/TD	ISO 527-3	MPa	90/80
Elongation at Break	MD/TD	ISO 527-3	%	350/450
Tensile Strength at Yield	TD	ISO 527-3	MPa	35
Tensile Modulus	MD/TD	ASTM D 882	MPa	800/900
Dart Drop		ASTM D 1709/A	g	350
Elmendorf Tear Strength	MD/TD	ASTM D 1922	g	20/40
Puncture Resistance, force		ASTM D 5748	N	30
Puncture Resistance, energy		ASTM D 5748	J	0.7

\*Data should not be used for specification work

\*\*The film properties are dependent on extrusion conditions.

Film properties: 15µm, BUR = 4:1, Neck Height = 8DD, Die gap 1.2mm

## PROCESSING GUIDELINES

**Borstar®FB1520** should be processed in HDPE film extruders in order to obtain optimal processing performance and mechanical properties.

Recommended processing conditions:

Melt temperature: 210 - 230°C  
Neck height: >5 x die diameter  
Blow up ratio >3:1

## FOOD CONTACT REGULATIONS

**Borstar®FB1520** fulfils the food contact regulations in most countries. If required, contact your Borouge representative for a certificate.

## STORAGE

The product should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

More information on storage can be found in Safety Information Sheet for this product.

## SAFETY

The product is not classified as a hazardous mixture.

Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system. Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

A Safety Information Sheet is available on request. Please contact your Borouge representative for more details on various aspects of safety, recovery and disposal of the product.

## RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

## RELATED DOCUMENTS

Most datasheets and statements are available on Borouge website [www.borouge.com](http://www.borouge.com).  
If more information is required, please contact a Borouge representative for information.