

## POLYMERS

# SABIC<sup>®</sup> HDPE Bimodal Blown Film F00851

## PRODUCT DESCRIPTION

F00851 is high molecular weight high density polyethylene copolymer grade specifically designed for blown film applications. 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

F00851 is recommended for blown film extrusion. It can be used for producing grocery sacks, shopping bags, refuse bags, thin film for bag on roll, wrapping film and also for replacement of thin paper products. Films produced with this product can be readily treated and printed to give high quality graphics.

## TYPICAL DATA

| PROPERTIES                                  | Unit              | Value <sup>(1)</sup> | Test Method |
|---------------------------------------------|-------------------|----------------------|-------------|
| Melt Flow Rate                              |                   |                      |             |
| @ 190°C & 5 kg load                         | g/10 min          | 0.3                  | ISO 1133    |
| @ 190°C & 21.6 kg load                      |                   | 9                    |             |
| Density @ 23°C                              | Kg/m <sup>3</sup> | 952                  | ISO 1183    |
| <b>MECHANICAL PROPERTIES <sup>(2)</sup></b> |                   |                      |             |
| Tensile Strength @ yield, MD, TD            | MPa               | 50 , 45              | ISO 527     |
| Tensile Elongation @ break, MD, TD          | %                 | 400 , 450            | ISO 527     |
| Dart Impact Strength, F50                   | g                 | 240                  | ASTM D 1709 |
| Elmendorf Tear Strength, MD, TD             | mN                | 200 , 450            | ISO 6383-2  |
| Hardness (Shore D)                          | --                | 62                   | ISO 868     |
| <b>THERMAL PROPERTIES</b>                   |                   |                      |             |
| Vicat Softening Point                       | °C                | 75                   | ISO 306     |
| Brittleness Temperature                     | °C                | < -80                | ASTM D 746  |

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

(2) Properties are based on 20 µm film produced at 4 BUR using 100% F00851.

Processing Conditions:

Melt Temperature: 200-225°C

Frost line Height: 6-8 times die Ø

BUR: 3-5