

## SABIC FI0644 Bimodal High Density Polyethylene for Blown Film

Category : Polymer , Film , Thermoplastic , Polyethylene (PE) , HDPE , High Density Polyethylene (HDPE), Film Grade

### Material Notes:

**Product Description:** FI0644 is a high molecular weight high density polyethylene copolymer grade specifically designed for blown film applications. Its high molecular weight, broad molecular weight distribution and high density combine successfully to give excellent extrudability with high impact properties. **Typical Applications:** FI0644 is recommended for blown film extrusion. It can be used for producing heavy duty bags, grocery sacks, shopping bags, refuse bags, liners for multi-wall sacks. The grade is suitable to blend with LLDPE & LDPE and can be used in co-extrusion process. Information provided by SABIC.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-FI0644-Bimodal-High-Density-Polyethylene-for-Blown-Film.php](http://www.lookpolymers.com/polymer_SABIC-FI0644-Bimodal-High-Density-Polyethylene-for-Blown-Film.php)

| Physical Properties | Metric                               | English                              | Comments |
|---------------------|--------------------------------------|--------------------------------------|----------|
| Density             | 0.944 g/cc                           | 0.0341 lb/in <sup>3</sup>            | ISO 1183 |
| Thickness           | 20.0 microns                         | 0.787 mil                            |          |
| Melt Flow           | 0.18 g/10 min                        | 0.18 g/10 min                        | ISO 1133 |
|                     | @Load 5.00 kg,<br>Temperature 190 °C | @Load 11.0 lb,<br>Temperature 374 °F |          |
|                     | 5.4 g/10 min                         | 5.4 g/10 min                         | ISO 1133 |
|                     | @Load 21.6 kg,<br>Temperature 190 °C | @Load 47.6 lb,<br>Temperature 374 °F |          |

| Mechanical Properties              | Metric        | English    | Comments        |
|------------------------------------|---------------|------------|-----------------|
| Hardness, Shore D                  | 60            | 60         | ISO 868         |
| Film Tensile Strength at Yield, MD | 50.0 MPa      | 7250 psi   | ISO 527         |
| Film Tensile Strength at Yield, TD | 45.0 MPa      | 6530 psi   | ISO 527         |
| Film Elongation at Break, MD       | 400 %         | 400 %      | ISO 527         |
| Film Elongation at Break, TD       | 450 %         | 450 %      | ISO 527         |
| Elmendorf Tear Strength MD         | 20 g          | 20 g       | ISO 6383-2      |
| Elmendorf Tear Strength TD         | 40 g          | 40 g       | ISO 6383-2      |
| Elmendorf Tear Strength, MD        | 1.00 g/micron | 25.4 g/mil | ISO 6383-2      |
| Elmendorf Tear Strength, TD        | 2.00 g/micron | 50.8 g/mil | ISO 6383-2      |
| Dart Drop                          | 13.0 g/micron | 330 g/mil  | F50; ASTM D1709 |
| Dart Drop Test                     | 260 g         | 0.573 lb   | F50; ASTM D1709 |

| Thermal Properties      | Metric      | English    | Comments  |
|-------------------------|-------------|------------|-----------|
| Vicat Softening Point   | 73.0 °C     | 163 °F     | ISO 306   |
| Brittleness Temperature | <= -80.0 °C | <= -112 °F | ASTM D746 |

| Processing Properties | Metric       | English      | Comments |
|-----------------------|--------------|--------------|----------|
| Melt Temperature      | 200 - 225 °C | 392 - 437 °F |          |
| Blow-up Ratio (BUR)   | 3.0 - 5.0    | 3.0 - 5.0    |          |

## Contact Songhan Plastic Technology Co.,Ltd.

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