

# SABIC® HDPE FJ00952

## HIGH DENSITY POLYETHYLENE

### DESCRIPTION

FJ00952 is TNPP additive free grade, high molecular weight High Density Polyethylene copolymer which has a broad molecular weight distribution. 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

FJ00952 resin is recommended for blown film extrusion. This product is suggested for the manufacture of high strength grocery sacks, shopping bags and high quality thin films for multi wall sack liners and replacement for thin paper products. Films of this product can be readily treated and printed to give high quality graphics.

### TYPICAL PROPERTY VALUES

Revision 20170706

| PROPERTIES                              | TYPICAL VALUES | UNITS             | TEST METHODS            |
|---|----------------|-------------------|-------------------------|
| <b>POLYMER PROPERTIES</b>               |                |                   |                         |
| <b>Melt Flow Rate</b>                   |                |                   |                         |
| at 190°C and 2.16 kg                    | 0.05           | g/10 min          | ASTM D1238 <sup>®</sup> |
| at 190°C and 21.6 kg                    | 9              | g/10 min          | ASTM D1238              |
| <b>Density</b>                          |                |                   |                         |
| at 23°C                                 | 952            | kg/m <sup>3</sup> | ASTM D1505              |
| <b>MECHANICAL PROPERTIES</b>            |                |                   |                         |
| <b>Dart Impact Strength</b>             | 180            | g/μm              | ASTM D1709              |
| <b>FILM PROPERTIES</b>                  |                |                   |                         |
| <b>Tensile Properties<sup>(1)</sup></b> |                |                   |                         |
| stress at break, MD                     | 60             | MPa               | ASTM D882               |
| stress at break, TD                     | 56             | MPa               | ASTM D882               |
| strain at break, MD                     | 400            | %                 | ASTM D882               |
| strain at break, TD                     | 550            | %                 | ASTM D882               |
| stress at yield, MD                     | 33             | MPa               | ASTM D882               |
| stress at yield, TD                     | 31             | MPa               | ASTM D882               |
| 1% secant modulus, MD                   | 1250           | MPa               | ASTM D882               |
| 1% secant modulus, TD                   | 1500           | MPa               | ASTM D882               |
| <b>Elmendorf Tear Strength</b>          |                |                   |                         |
| MD                                      | 12             | g                 | ASTM D1525              |
| TD                                      | 60             | g                 | ASTM D1525              |
| <b>THERMAL PROPERTIES</b>               |                |                   |                         |

| PROPERTIES                  | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Vicat Softening Temperature | 125            | °C    | ASTM D1525   |

(1) Properties are based on 15 µm film produced at 4 BUR using 100% FJ00952.

## PROCESSING CONDITIONS

Typical processing conditions for FJ00952 are:

Melt Temperature: 200 - 235°C

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.

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical/medical applications.

## STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

## DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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