# Product Data Sheet Polyethylene

# FT5230

LDPE for Film

#### **DESCRIPTION**

FT5230 is a Low Density Polyethylene for Film extrusion produced by high pressure Tubular technology.

This grade is developed for the production of packaging film with good optical properties for shrink wraps and medium duty film applications.

FT5230 contains no additives.

#### **APPLICATIONS**

| Shrink film                    | Agriculture Film (incl. Greenhouse Film) |  |  |
|--------------------------------|--|--|--|
| Lamination Films               | Food Packaging                           |  |  |
| FFS Bags                       | Carrier Bag film                         |  |  |
| Aluminum Composite panel sheet |  |  |  |

# **SPECIAL FEATURES**

| Easy process ability    | Balanced Shrinkage                |
|-------------------------|-----------------------------------|
| Good seal properties    | Good mechanical & optical balance |
| Excellent organoleptics | Mono layer & co-extrusion films   |

#### **PHYSICAL PROPERTIES**

| Property                                | Typical Value | Unit    | Test Method  |
|---|---------------|---------|--------------|
| Density                                 | 923           | Kg/m³   | ASTM D 792   |
| Melt Flow Rate MFR (190 °C/2.16 kg)     | 0.75          | g/10min | ASTM D1238   |
| Melting Temp.                           | 112           | °C      | ISO 11357/03 |
| Vicat softening temperature A50 ( 10N ) | 96            | °C      | ISO 306      |

<sup>\*</sup>Data should not be used for specification work





# **FILM PROPERTIES**

| Property                    |       | Typical Value | Unit | Test Method   |
|-----------------------------|-------|---------------|------|---------------|
| Tensile Strength at Break   | MD/TD | 27/24         | MPa  | ISO 527-3     |
| Elongation at Break         | MD/TD | 250/550       | %    | ISO 527-3     |
| Tensile Modulus             | MD/TD | 200/230       | MPa  | ASTM D 882    |
| Coefficient of Friction     |       | 0.8           | -    | ASTM D 1894   |
| Gloss at 60 degree (of arc) |       | 85            |      | ASTM D 2457   |
| Haze                        |       | 8             | %    | ASTM D 1003   |
| Dart Drop                   |       | 120           | g    | ASTM D 1709/A |
| Tear Strength               | MD/TD | 4/2           | N    | ASTM D 1922   |

<sup>\*</sup>Data should not be used for specification work

Film properties: 40µm, BUR=2.5:1, Die gap 1.2mm

#### **PROCESSING GUIDELINES**

FT5230 can be processed easily on most types of blown film equipment such as LDPE, LLDPE or HDPE extruders.

Recommended processing conditions:

 Melt temperature
 160 –190°C

 Die gap
 > 1.0 mm

 FLH:
 > 2 DD

 BUR:
 > 2:1

# **FOOD CONTACT REGULATIONS**

FT5230 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.





<sup>\*\*</sup>The film properties are dependent on extrusion conditions.

#### FT5230

#### **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 <a href="www.borouge.com">www.borouge.com</a>. If more information is required, please contact a Borouge representative for information.

#### **DISCLAIMER**

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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