



Doc
Name:

Product Data sheet -Low Density polyethylene
LFI 2047 A

Page: 1 of 2

Typical Data

| Properties | Value ⁽¹⁾ | unit | Test method |
|--|----------------------|--------|---------------|
| Physical Properties | | | ISO 1133 |
| MFI (190 °C / 2 .16 Kg) | 4.7 | dg/min | ISO 1183 (A) |
| Density | 920 | Kg/m3 | |
| Mechanical properties ⁽²⁾ | | | |
| Impact strength | 15 | KJ/m | ASTM D 4272 |
| Tear strength (TD) | 25 | KN/m | ISO 6383-2 |
| Tear Strength (MD) | 80 | KN/m | ISO 6383-2 |
| Yield stress (TD) | 11 | MPa | ISO 527 |
| Yield stress (MD) | 12 | MPa | ISO 527 |
| Tensile Stress at break (TD) | 15 | MPa | ISO 527 |
| Tensile Stress at break (MD) | 27 | MPa | ISO 527 |
| Strain at Break (TD) | >500 | % | ISO 527 |
| Strain at Break (MD) | 100 | % | ISO 527 |
| Modulus of Elasticity (TD) | 200 | MPa | ISO 527 |
| Modulus of Elasticity (MD) | 200 | MPa | ISO 527 |
| Coefficient of friction | 0.2 | | ASTM D 1894 |
| Blocking | 20 | g | SABTEC method |
| Re-blocking | 10 | g | SABTEC method |
| Optical properties ⁽²⁾ | | | |
| Haze | 9 | % | ASTM D 1003A |
| Gloss(45°) | 55 | % | ASTM D 2457 |
| Clarity | 21 | mV | |
| <i>Additive: Antioxidant , Slip agent, Anti blocking agent</i> | | | |

Notes:

- (1) Typical Values: not to be construed as specifications limits.
- (2) Properties are based on 25 µm blown film produced at a melt temperature of 160°C and 3 BUR using 100% LTM 2047/37.

Product Description

LFI2047A is a low density polyethylene, with good toughness and good optical properties. This product contains a medium level of anti-block and slip agent (Erucamide), has low energy consumption during processing and a good draw down ability. It typically exhibits low friction and low blocking.

Typical Application

LFI2047A is recommended for blown film extrusion. This product is very suitable for high clarity laundry bags, textile wrapping films and zip lock bags. This grade enables high speed converting without sticking.

General Information

Licenser: LFI2047A has been manufactured using SABTEC licensed technology.
Producer: ARYA SASOL Polymer Company.

Processing Conditions

Note: *This information is based on our current knowledge and experience .In view of many factors that may affect processing and application, this data does not relive processors from the responsibility of carrying out their own tests and experiments, neither does it imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.*



Doc
Name:

Product Data sheet -Low Density polyethylene
LFI 2047 A

Page: 2 of 2

Extruder temperature profile: 145-160°C

Frost line height: 5-7 times die diameter

Blow Up Ratio: 2-3

Recommended film thickness: 25 to 50 µm

Please note that, these processing conditions are recommended by producer only for 100% LFI2047A resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.

Packaging

Supplied in pellet form and can be packaged in 25kg Bags, one ton semi bulk or 17 tons bulk containers.

Food Packaging

The above mentioned grade meets the relevant requirements of plastics directive 2002/72/EC (06-08-2002) and its amendments till directive 2008/39EC relating to plastic materials and articles intended to come into contact with foodstuffs.

Pharmaceutical Application

The above mentioned grade meets the requirements of the European pharmacopeia version 6 section 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. Be equipped with adequate filters.
2. Is operated and maintained in such a manner to ensure no leaks develop.
3. That adequate grounding exists at all times.

We further recommend that good housekeeping will practiced throughout the facility.

Storage

All resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. It is also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality. ASPC 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 also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes is required. Fabrication areas should be ventilated to carry away fumes or vapors.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

Note: *This information is based on our current knowledge and experience .In view of many factors that may affect processing and application, this data does not relive processors from the responsibility of carrying out their own tests and experiments, neither does it imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.*