

Doc Name: Product Data sheet -Low Density polyethylene

LFI2119

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Typical Data

Properties	Value (1)	unit	Test method
Physical Properties			
MFI (190 °C /2 .16 Kg)	1.9	dg/min	ISO 1133
Density	921	Kg/m3	ISO 1183 (A)
Mechanical properties (2)			
Impact strength	26	KJ/m	ASTM D 4272
Tear strength (TD)	25	KN/m	ISO 6383-2
Tear Strength (MD)	60	KN/m	ISO 6383-2
Yield stress (TD)	11	MPa	ISO 527
Yield stress (MD) Tensile stress at break (TD) Tensile stress at break (MD) Strain at Break (TD)	13 20 35 >500	MPa MPa MPa %	ISO 527 ISO 527 ISO 527 ISO 527
Strain at Break (MD)	>150	%	ISO 527
Modulus of Elasticity (TD)	200	MPa	ISO 527
Modulus of Elasticity (MD)	190	MPa	ISO 527
Coefficient of friction	>1		ASTM D 1894
Blocking	20	g	SABTEC method
Re-blocking	100	g	SABTEC method
Optical properties (2)			
Haze	9	%	ASTM D 1003A
Gloss (45°) Clarity	55 26	% mV	ASTM D 2457
Additive: Antioxidant			

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 170°C and 3 BUR using 100% LFI2119.

Product Description

LFI2119 is a low density polyethylene, with excellent optical properties. This grade offers a high output and excellent draw down and specially designed for general purpose thin films.

Typical Application

LFI2119 is recommended for blown film extrusion. This product is suitable for manufacture of general purpose LDPE film packaging and general lamination films.

General Information

Licensor: LFI2119 has been manufactured using SABTEC licensed technology.

Producer: Arya Sasol Polymer Company

Processing Conditions:



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Extruder temperature profile: 160-185°C Frost line height: 5-7 times die diameter.

Blow Up Ratio: 2-3

Recommended film thickness: 20 to 50 µm

Please note that, these processing conditions are recommended by producer only for 100% LFI2119 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 from) 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. 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.