

LDPE-LH0030

Low Density Polyethylene for Film Application

General Description

LH0030 is a high molecular weight low density polyethylene film grade combining good flexible extrusion behavior and superior mechanical properties.

Additive: Antioxidant

Typical Applications

- General packaging
- Heavy duty films
- Shrink films
- Construction films
- Agricultural films

Product Specification

PHYSICAL/MECHANICAL PROPERTIES	VALUE*	UNIT	TEST METHOD
MFI (190 °C /2 .16 Kg)	0.3	g/10 min	ISO 1133
Density	921	kg/m ³	ISO 1183 (A)
Impact strength	31	KJ/m	ASTM D 4272
Tear strength (TD)	45	KN/m	ISO 6383-2
Tear strength (MD)	20	KN/m	ISO 6383-2
Yield stress (TD)	10	MPa	ISO 527
Yield stress (MD)	11	MPa	ISO 527
Tensile stress at break (TD)	24	MPa	ISO 527
Tensile stress at break (MD)	22	MPa	ISO 527
Strain at break (TD)	>500	%	ISO 527
Strain at break (MD)	>350	%	ISO 527
Modulus of elasticity (TD)	150	MPa	ISO 527
Modulus of elasticity (MD)	140	MPa	ISO 527
Coefficient of friction	0.7		ASTM D 1894
Blocking	<5	g	SABTEC method
Re-blocking	20	g	SABTEC method
Optical properties			
Haze	12	%	ASTM D 1003A
Gloss (45°)	55	%	ASTM D 2457
Clarity	50	mV	SABTEC method

* Typical values; not to be considered as product specification.

Note: Film properties have been obtained at 25 µm with a BUR of 3.

Rayomand Petroleum and Energy Commercial Co. 2 nd Floor, No. 48, 37 th Avenue - Saadat Abad Blvd. Tehran - Iran	Tel: +98 21 2265 9165 Fax: +98 21 2265 9110	www.rayomand.com email: info@rayomand.com
--	--	--

NOTICE: All tests were performed under laboratory conditions and standard testing methods. The data are intended as a general guide only and do not necessarily represent results that might be obtained elsewhere. The use of this product must be guided by the user's own methods for selection of proper formulation. RAYOMAND disclaims any responsibility for misuse or misapplication of this product. RAYOMAND makes no warranty of merchantability and there is no warranty that goods supplied shall be fit for any particular purpose. RAYOMAND liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited. The customer is responsible for determining whether products and information in this document are appropriate for the customer's use.

Processing

LH0030 is a grade with excellent toughness and outstanding biaxial shrink properties. The material contains only antioxidant, has very low energy consumption during processing and has excellent draw down ability.

Packaging

Supplied in pellet form and can be packaged in 25 kg bags, 1 ton semi bulk or 17 ton bulk.

Food contact

LH0030 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

LH0030 meets the requirements of the European pharmacopeia version 6 section 3.1.5 for pharmaceutical application.

Conveying

Conveying equipment should be designed 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 recommended that good housekeeping will practiced throughout the facility

Storage

As ultraviolet light may cause a change in the material, 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.

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.