

LDPE-LH0075

Low Density Polyethylene for Film Application

General Description

LH0075 is a high molecular weight low density polyethylene film grade with good flexible extrusion behavior and superior mechanical properties. Film made from LH0075 exhibits high dart impact, excellent yield, tensile strength and high stiffness. It can be processed on automatic machines. It possesses good dimensional stability. LH0075 is chiefly recommended for extrusion of blown film. It is suitable for shrink film having a high resistance to hole formation and high degree of shrinkage on cooling.

Additive: Antioxidant

Typical Applications

- Carrier bag
- Shrink film
- Industrial film
- Dust bin liners
- Large bottles
- Blow moulding of small containers
- Packaging of pharmaceutical products

Product Specification

PHYSICAL/MECHANICAL PROPERTIES	VALUE*	UNIT	TEST METHOD
MFI (190 °C/2.16 kg)	0.75	g/10 min	ASTM D 1238
Density	0.921	g/10 min	TSTM 209B **
Vicatsoftening point	94	°C	ASTM D 1525
Elongation @ break (MD)	300 (Min)	%	ASTM D 882
Elongation @ break (TD)	450 (Min)	%	ASTM D 882
Tensile @ break (MD)	170 (Min)	kg/cm ²	ASTM D 882
HDT	33	°C	ASTM D 648
Dart impact	120 (Min)	g	ASTM D 1709

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

**TSTM = Toyo Soda Standard Test Method.

Process conditions:

LH0075 can be easily processed in all types of extruders. The temperature of the polymer at the die output should be in the range of 180-210 °C. It is recommended to limit the predominant orientation of the film along the machine direction by working with a blow up ratio of 2 to preserve excellent mechanical properties. Film temperature at the nip rollers and haul-off should be kept close to the ambient temperature.

Packaging

Supplied in pellet form and can be packaged in 25 kg bags.

Food contact

LH0075 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

LH0075 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.