RAYOMAND
Petroleum & Energy Industries Commercial Co.

Technical Data Sheet

LDPE-LP0470KJ

Low Density Polyethylene for Film Application

General Description

LP0470KJ is a high molecular weight low density film grade polyethylene combining good flexible extrusion behavior and superior mechanical properties. LP0470KJ is suitable for very thin film, requiring very good optical properties

Typical Applications

- Textile packaging

Additive: Antioxidant, slip agent, anti blocking agent

Product Specification

PHYSICAL/MECHANICAL PROPERTIES	VALUE*	UNIT	TEST METHOD
MFI (190 °C /2 .16 Kg)	4.7	g/10 min	ISO 1133
Density	920	kg/m^3	ISO 1183 (A)
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 easticity (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			
Haze	9	%	ASTM D 1003A

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Gloss (45°)	55	%	ASTM D 2457
Clarity	21	mV	SABTEC method

* Typical values; not to be considered as product specification.
Note: Film properties have been obtained at 45 µm with a BUR of 3.

Processing

LP0470KJ is a grade with good toughness and good biaxial shrink properties. The material contains on additives, has a low energy consumption during processing and a good 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

LP0470KJ 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

LP0470KJ 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 from) 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.

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