

## LDPE- Low Density Polyethylene LTM 2047/37

### Typical Data

Properties	Value	Unit	Test method
<b>Polymer Properties</b>			
MFI (190 0C /2 .16 Kg )	4.7	dg/min	ISO 1133
Density	920	Kg/m <sup>3</sup>	ISO 1183 (A)
<b>Mechanical properties</b>			
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
<b>Coefficient of friction</b>	0.2		ASTM D 1894
<b>Blocking</b>	20	g	SABTEC method
<b>Re-blocking</b>	10	g	SABTEC method
<b>Optical properties</b>			
HAZE	9	%-	ASTM D 1003A
Gloss (45o )	55	%	ASTM D 2457
Clarity	21	mV	SABTEC method
Additive :Antioxidant			

Film properties have been measured at 120µm with a BUR of 3.

### Application

LTM 2047/37 intended for very thin film, requiring very good optical properties and thus very suitable for laundry and textile packaging

### **General information**

LTM 2047/37 has been manufactured using SABTEC licensed technology.

### **Processing**

LTM2047/37 is a grade with high level of anti block and slip agent (Erucamide) the grade has an excellent draw down ability. The films produced from this grade are stiff, have excellent optical properties, low COF and no blocking.

### **Packaging**

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

### **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 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 0C. 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.

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