

FICHE TECHNIQUE

Référence : FEB19

Désignation : Film étirable cast RAJASTRETCH

1. THE SUBJECT OF TECHNICAL SPECIFICATIONS

The subject of the technical specification is polyethylene, three-layered, transparent stretch film produced in CAST technology. Stretch film is produced from LLDPE linear low density polyethylene

2. THE SCOPE OF APPLICATION

LLDPE stretch film is produced by [redacted] to pack and secure products on the pallets, the film is applied to manual use. LLDPE film is not intended for direct contact with food products.

3. GRADUATION AND DESIGNATION

Machine LLDPE stretch film:

- CORE HAND STRETCH FILM
- NONCORE HAND STRETCH FILM



[redacted] stretch film is not wound on cardboard cores and because of this, it is more competitive compared to standard hand film:

- Product fee is reduced or completely eliminated.
- Waste treatment costs are reduced or completely eliminated.
- Product is easy to use.
- Environmental costs are reduced.
- The solution is environmentally-friendly thanks to 100% utilization.



4. REQUIREMENTS

4.1. The conformity with EU directives

LLDPE stretch film meets the requirements of EU directive no 94/62/EC, that is:

- Stretch film's production process allows to limit its volume and mass to required minimal quantities which still assure film's functions and meet client's expectations.
- PE stretch film, designed and produced by [REDACTED] allows material recycling; film wastes undergo regranulation and are recirculated to technological process as raw material.
- The production process of PE stretch film allows to reduce the content of substances hazardous to health and life of individuals or environment: raw material suppliers' statements concerning the absence of harmful and hazardous substances.
- The maximal total content of lead, cadmium, mercury and hexavalent chromium does not exceed 100 mg/kg per packet, the data is verified by means of periodical tests conducted by an accredited laboratories.

4.2. Product appearance

- The surface of the product should be uniform, with no creases.
- Permissible mechanical impurities (foreign matter, oxidized polymer) may range between 0.3 mm² and 0.6 mm² provided they do not create clusters or holes with a total number exceeding 2 units /m².
- The surface of the film may include some swellings resulting from uneven thickness of the film web.
- The reciprocal displacement of the layers or fragments of the film web may not exceed the admissible film net width.



- It is admissible that the surface includes so called herringbone pattern, which do not cause any decrease of film mechanical durability.

4.3. Dimensions

- Film width: 500 mm (standard) 450 mm, 400 mm. The admissible deviation of the film length: ± 5 mm.
- Film length: depending on the thickness and weight of the manufactured product

Thickness	Film width [mm]	Net roll weight [kg]	Roll length [m]
12	500	3.00	545
15	500	2.07	300
	450	1.85	300
17	500	2.34	300
	450	2.10	300
20	500	2.76	300
	450	2.48	300
23	500	3.16	300
	450	2.85	300
30	500	2.75	200

* The above dimensions are standard, there is possibility to produce non-standard film according clients individual specifications.

- Film thickness: from 12 μm to 30 μm . The admissible deviation is ± 1 μm
- The admissible deviation of the roll weight is $\pm 0,05$ kg



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* 0,099 € HT/m

4.4. Physical and mechanical properties of LLDPE stretch film

Physical and mechanical properties of the hand stretch film produced by [redacted] are under statistical control of the Laboratory. The examination of physical and mechanical properties of hand stretch film includes

- The examination of film appearance The examination is carried out according to specifications described by norm PN-C-89258-2 „Plastics. Packaging films. Low density polyethylene film”
- Film width examination. The examination is carried out according to specifications described by norm PN-ISO 4592 „Plastics. Films and panels. Length and width marking”.
- The examination of mechanical resistance of film sample. The examination is carried out according to method used to determine the mechanical resistance of film – own method

TESTS CONDUCTED ON TESTING MACHINE:



Quality Test –

During this test, the resistance and quality of the film running in the guaranteed stretch is checked.

Ultimate Test –

Tear resistance test specifies the maximum stretch value before the film is torn.

Puncture Test –

Puncture test specifies the force [kg] needed to punch puncture the film.

Retention Test –

Retention test determines the maximal force value [kg] generated by film pressure in one point.



The ready product control results are noted down in Control Report. Quality Control Report- Polyethylene Stretch Film. The resistance properties of LLDPE hand stretch film are presented in appendix no 1/ Technical specification - Hand stretch film.

	MECHANICAL RESISTANCE PARAMETERS FOR LLDPE HAND STRETCH FILM	Appendix no 1/ Technical specification -Hand stretch film
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J U M B O 0 1 5

		Thickness	12	15	17	20	23	30	Unit	Method
Stretch up to breaking point	minimal average	200 269	231 289	239 299	251 314	261 326	279 349	%		
Guaranteed stretch		100	100	100	100	100	100	%		
Retention value	minimal average	0,60 0,75	0,73 0,91	0,81 1,01	0,94 1,17	1,06 1,32	1,35 1,69	kg		
Puncture force value	minimal average	0,87 1,09	1,12 1,40	1,28 1,60	1,53 1,91	1,77 2,21	2,34 2,93	kg		

5. PACKAGING, STORAGE AND TRANSPORT

5.1. Packaging

LLDPE hand stretch film is packed in a way which secures rolls against mechanical damage and dirt during transport. The film is wound on cardboard cores. The rolls are packed by six units per carton or multi-pack and placed on a pallet: 1200 mm x 1000 mm or 1200 mm x 800 mm. The size of the carton and the number of units on the pallet depends on the product type and is individually adjusted to order.

Noncore hand film is packed by six units per carton or multi-pack and placed on a pallet: 1200 mm x 1000 mm or 1200 mm x 800 mm. The size of the carton and the number of units on the pallet depends on the product type and is individually adjusted to order.

Every pallet is labeled with product tag with the name of a Client and product data.

Each product tag includes signs which indicate what precaution means should be undertaken while handling the packet during storage, transport and usage of LLDPE pre-stretch film.



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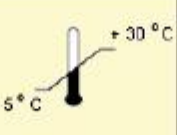
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* 0,099 € HT/min

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PRODUCT TAG SIGNS

				
Low Density Polyethylene LDPE packaging	Recyclable	Observe temperature range	Protect against humidity	Protect against (constant) heat
(Official Journal of Laws of 2004, No. 94 item 927)	(Official Journal of Laws of 2004, No. 94 item 927)	PN-85/0-78252-I-1	PN-85/0-78252-I-1	PN-85/0-78252-I-1

5.2. Storage

LLDPE hand stretch film should be stored in a well ventilated and dry place, at least 1m away from heating units. The ambient temperature of storage should not exceed the scope of -5 °C to +30 °C. The film should be protected against the direct sun heat and humidity.

5.3. Transport

The product should be transported carefully by covered means of transport, protected against mechanical damage and atmospheric influences. LLDPE hand stretch film is very susceptible to mechanical damage so tearing off the web during wrapping procedures is, in most cases, a result of the lack of carefulness during utilization of the film.