

1 - CONSTRUCTION

- Woven tapes with 100% POLYESTER yarn in wrap and weft, (continuous yarns). heat shrinkable.

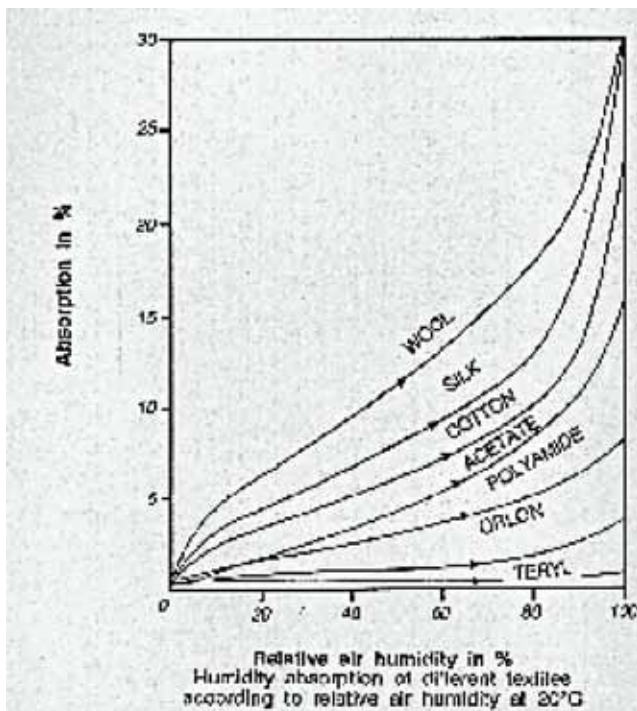
1 - DESIGNATION OF THE POLYESTER YARNS

TERYLENE - DACRON - TERGAL -
TREVIRA - DIOLAN

- This yarn belongs to super-polycondensats class.
- It has a good UV resistance.
- It is slightly water absorbent but is sensitive to hydrolysis.
- It has a high melting point temperature.
- It is little inflammable

1.2 - PHYSICAL CHARACTERISTICS

- 1.2.1- Thermal conductivity = 2×10^{-4} CGS
 Sticking point = 240 °C
 Melting point = 260 °C
- 1.2.2- High resistance to wearing and tearing.
 Same breaking strength as nylon.
 Resists to mould and others micro - organisms.
- 1.2.3- Inflammability
 Not very inflammable. Placed by a flame, it starts to burn slowly . If taken away from the flame, the burning stops by itself.
 5 h at 175 °C = loses 6% of its resistance and 30% after 78 h.
 At 175 °C , other fibres are destroyed glass excepted.



1.1 - CHEMICAL CHARACTERISTICS

1.1.1 - Action of acids :

- Organic = None
- Phosphoric = None
- Nitric = decreasing of resistance -1
- Chloridric acids = decreasing of resistance -1 in very hard conditions of use.

1.1.2 - Action of bases :

- Under pressure alkaline treatments = avoid
- Hydrolysis by bases = low
- Hot caustic soda dissolves polyester fibres.

1.1.3 - Action of organic solvents :

- Benzene - Trichlorethylene - Perchlorethylene.
- Tetrachlorid of carbon - Petrol.
- Chlorine hydrocarbons - Alcohols - Acetones.
- Aldehydes - Ethers - Esters. etc ...
- These have no action on polyester fibres.

1.3 - ELECTRICAL CHARACTERISTICS

Electrical properties are measured on a dry at 25 °C

1.3.1 - Dielectric constant.

- 60 HZ = 3,9
- 1000 HZ = 3,9
- 1 000 000 HZ = 3,9

1.3.2 - Power factor.

- 60 HZ = 0,2
- 1000 HZ = 0,6
- 1 000 000 HZ = 0,4

1.3.3 - Resistivity.

- 10^{15} ohms / cm

1.4 - MOISTURE ABSORPTION

1.4.1 - Moisture absorption at HR 65% and 20 °C = 1%

- Cotton takes 8 %
- Wool takes 15 %

SEE SKETCH

- 1.5 - FABRICATION OF TAPES

1.5.1 Type of weaving

- **LINEN** : Perpendicular weaving, wrap and weft. For a similar thickness, the linen weaving makes a tape with more holding, but less supple than serge weaving.
- **SERGE** : Herringbone weaving. It allows to have a tape which can bend out of shape slightly more easily than a linen woven tape, it better gets into its position in low radius bends.

1.5.2 Designation of tape

- Width :

Admitted tolerance is ± 1 mm, measure is made with a steel rule graduated in mm.

- Thickness :

Measured with a dial micrometre. Touch diameter 14 mm, pressure 320 milibars.

- Breaking resistance :

The tests are with an electrical motor dynamometre.

The recommended jaw system is "roller system".

It keeps away from any unifilar breaking of the yarns composing the tape.

Distance between jaws 10 cm.

- Weight per metre :

The weight in gr. per 1 cm width is indicative. Please see the chart of characteristics of TERYL tape. Tolerance is $\pm 10\%$.

- Elongation :

2 types : at 2/3 of nominal resistance. Under charge.

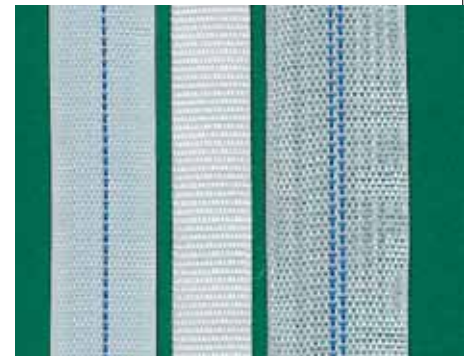
- Thermo shrinkage :

2 types : with no charge. Under charge. In the board of REFERENCE, we have indicated :

LOW	MEDIUM	HIGH
(< 5%)	($\geq 5\%$ $\leq 10\%$)	(>10%)

1.5.3 Marking yarn

- The marking yarn allows to :
- Save some tape in the length as the covering is regular when placed in the middle of the width.
- Possibility of placing the marking yarn in a different way or putting it away.
- Possibility of having a marking yarn in other colors.

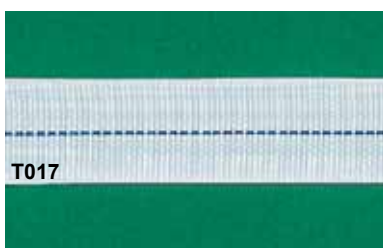
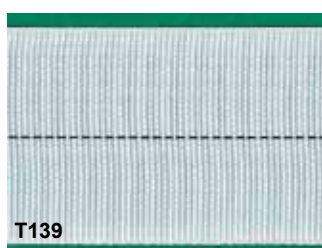
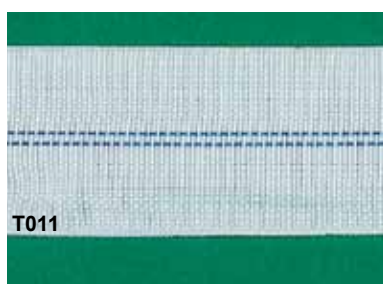


2 - APPLICATIONS

- A Polyester shrinkable tape "TERYL" is used when are required the following :
- A shrinkage (tightening) further to temperature effect, when impregnating or when going into an oven.
- A good resins catching, a good penetration of polyester, epoxy resins, etc.
- The TERYL tape properties are : Good resistance to mechanical shocks. Good elasticity for taping operations.
- The TERYL tape does not cause allergies or itching when handled, unlike glass tape could do according to the sensitiveness of each user.
- Please do be careful with the temperatures to be reached according to applications, as it is class F. For class H applications, CETAVER (glass) tapes must be used. Or there are some mixed TERYL/CETAVER or CETAVER / TERYL tapes, G3.
- References with low lengthways shrinkage are used for taping to make insulation and mainly in finishing.
- References with high lengthways shrinkage are used to bind elements together or to be a mechanical tightening means.
- The final binding is obtained by the tape shrinkage under the temperature effect.

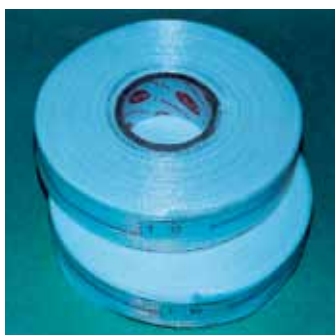
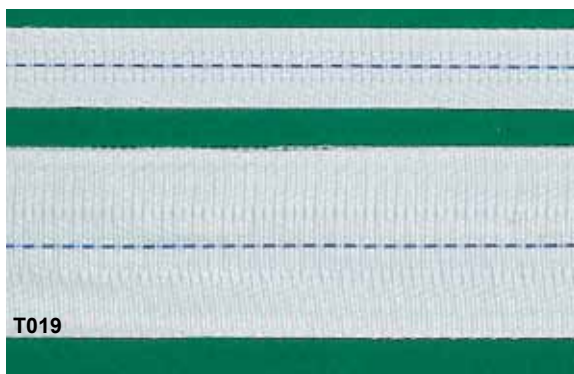
LINEN WEAVING

THICKNESS mm	REFERENCE	WIDTH mm from - to	WEIGHT g/m by cm / width	BREAKING STRENGTH daN / cm width	SHRINKAGE
0.08	T 020	10 à 20	0.47	10	MEDIUM
0.13	T 011	20 à 50	0.85	28	HIGH
0.13	T 017	10 à 60	0.75	14	MEDIUM
0.16	T 139	10 à 50	1.00	35	HIGH
0.20	T 139.067	10 à 50	1.15	35	HIGH
0.18	T 120	10 à 20	0.95	20	LOW
0.20	T 223	10	1.40	40	HIGH
0.25	T 048	08 à 10	2.55	120	LOW
0.35	T 024	10 à 35	1.95	45	MEDIUM
0.35	T 145	23 à 50	1.80	44	LOW
0.35	T 047	10 à 20	1.35	25	HIGH
0.35	T 036	10 à 15	2.50	110	MEDIUM

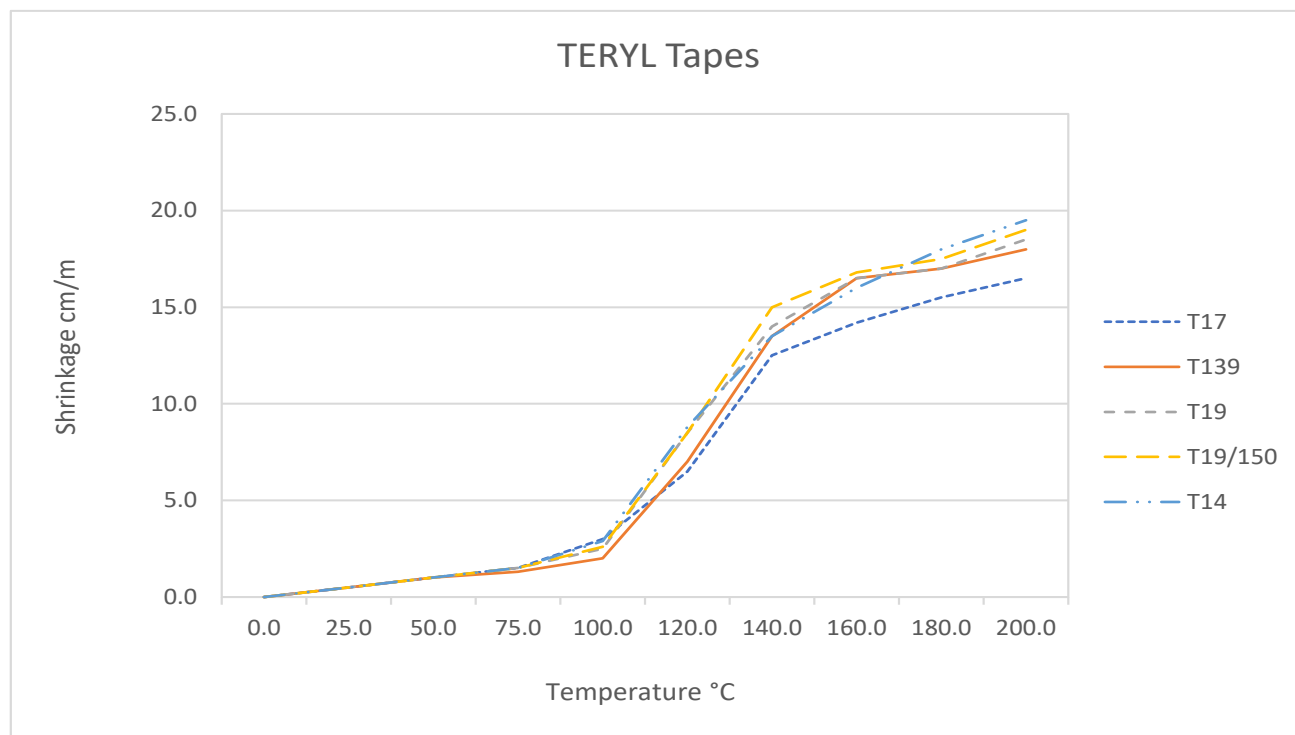


SERGE WEAVING

THICKNESS mm	REFERENCE	WIDTH mm from - to	WEIGHT g/m by cm / width	BREAKING STRENGTH daN / cm width	SHRINKAGE
0.20	T 016	10 à 50	1.50	60	LOW
0.25	T 019	10 à 50	1.50	50	HIGH
0.25	T 019/150	25 à 30	1.75	50	HIGH
0.30	T 171	15 à 25	1.65	40	LOW
0.40	T 014	25 à 40	2.70	120	HIGH
0.45	T 022	13 à 60	2.15	40	MEDIUM

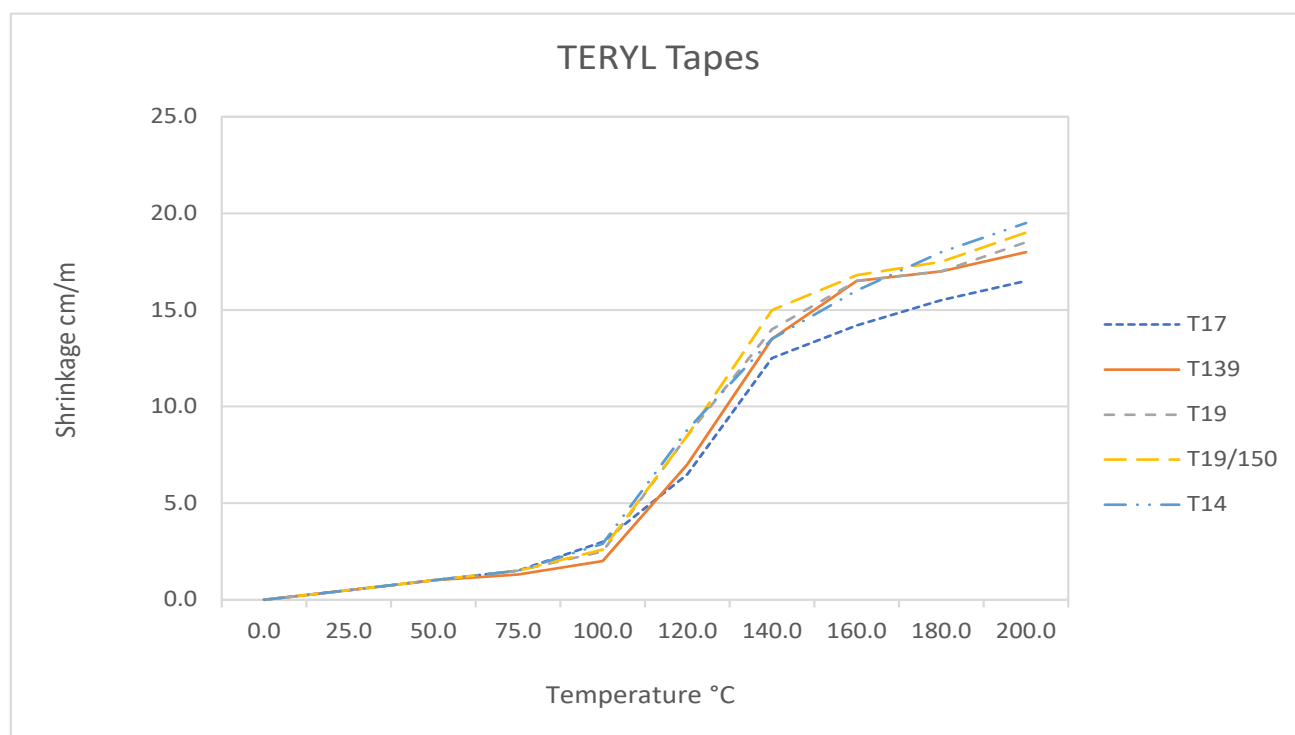


- This sketch shows the percentage of shrinkage of tapes without charges, according to temperature.



- This sketch shows the percentage of shrinkage according to the charge (in daN/cm of width) and at a temperature of 155°C for 1 hour.

- It can be noticed that the tapes react differently.



3 - PRESENTATION

- Each roll is measured under tension in order to have tight rolls.
- The standard inside ring is made of reinforced carboard.
- 2 types of ring : inside diameter 40 mm and 55 mm (standard in electrotechnical industry) as it makes the handling of the roll easier, for manual taping.
- The end of the roll is stopped by a small adhesive label.
- After control the rolls are gathered in a cylindre and wrapped in a transparent thermoshrinkable plastic film.

2 TYPES OF MEASURING

AUTOMATIC

The length per roll depends on the thickness of the tape

Thickness 0,08 to 0,30 mm = 50 M

Thickness 0,40 mm and over = 25 M

Possibility of measuring in 100M - rolls

MANUEL

This type of measuring is used when the customer needs special conditioning

NOTA: The number of rolls per cylinder can vary. It depends on the real width of the tape.

AUTOMATIC						
THICKNESS OF TAPES mm	OUTSIDE DIAMETRE OF ROLL mm	PACKS PER BOX	WIDTH OF TAPES mm	LENGTH PER ROLL m	LENGTH PER PACK m	ROLLS PER PACK see nota
0,08	090 - 095	9	08	50	1700	34
0,10	095 - 100	9	10	50	1400	28
0,13	100 - 105	9	12	50	1150	23
0,15	105 - 107	6	15	50	0950	19
0,20	115 - 120	6	20	50	0700	14
0,25	125 - 130	6	25	50	0550	11
0,30	153 - 158	6	30	50	0450	09
			40	50	0350	07
0,40	125 - 135	6	08 - 10 - 12 15 - 20 - 25 30 - 40	25 - 25 - 25 25 - 25 - 25 25 - 25	850 - 700 - 575 475 - 350 - 275 225 - 175	34 - 28 - 23 19 - 14 - 11 9 - 7
MANUAL						
THICKNESS mm	INSIDE RINGS DIAMETER - mm	OUTSIDE RINGS DIAMETER - mm	LENGTH PER ROLL m			
ALL THE THICKNESSES from 0,05 to 0,40 mm	ALL TYPES OF RINGS Ø 40 - 55 - 70 - 76 - 150 mm	MAXI 500 mm	MAXI 1200 M			

- SHELF LIFE
- Unlimited but keep away from humidity and preferably storing in their original plastic film packing, cylinder up.