

## VerCAST L technical data sheet

### POLYPROPYLENE NON-ORIENTED CAST FILM with sealing layers

#### ADVANTAGES

- good mechanical and optical properties
- optimal sealing properties
- increased coefficient of friction
- high barrier properties and water-steam permeation
- antistatic and antyblocking properties to simplify packaging process on packaging machines
- one side corona treatment (outer layer of the roll)

#### APPLICATIONS

- packaging for food, textiles, flowers, fresh herbs and others
- for horizontal packaging confectionary like bread, bars, cakes and other
- suitable for lamination with other films eg. PE, BOPP, PET
- suitable for flexo and roto printing

#### TECHNICAL PARAMETERS

Requirements	Nominal/guaranteed value											Research method
Thickness [ $\mu\text{m}$ ], $\pm 6\%$	20	23	25	30	35	37	38	40	43	45	50	ISO 4593
Density [ $\text{g}/\text{cm}^3$ ]	0,9											ISO 845
Unit weight [ $\text{g}/\text{m}^2$ ]	18,0	20,7	22,5	27,0	31,5	33,3	34,2	36,0	38,7	40,5	45,0	ISO 536
Packaging capability [ $\text{m}^2/\text{kg}$ ]	55,6	48,3	44,4	37,0	31,7	30,0	29,2	27,8	25,8	24,7	22,2	ISO 536
Tensile strength [ $\text{N}/\text{mm}^2$ ]												ISO527 -1, -3
- MD, not less than	20	22	23	25	27	27	27	28	28	28	28	
- TD, not less than	15	16	17	18	19	19	19	19	19	19	20	
Elongation at break [%]												ISO527 -1, -3
- MD, not less than	450	450	450	480	500	500	500	500	500	500	500	
- TD, not less than	480	480	500	500	520	520	520	520	520	540	550	
Coefficient of friction (film/film), NT/NT, not more than	0,35											ISO 8295
Haze* [%], no more than	3,0	3,1	3,2	3,4	3,5	3,6	3,7	3,8	3,9	3,9	4,0	ASTM D 1003
Gloss (45°)* [%], not less than	88											ASTM D 2457
Treatment [ $\text{mN}/\text{m}$ ], not less than	36											ISO 8296
Lamination and print usability	tak											MW/Veroni- Pak/01
Sealing temperature range [ $^{\circ}\text{C}$ ]**	125-150											

Requirements	Nominal/guaranteed value											Research method
	55	60	65	70	75	80	90	100	110	150	165	
Thickness [ $\mu\text{m}$ ], $\pm 6\%$	55	60	65	70	75	80	90	100	110	150	165	ISO 4593
Density [ $\text{g}/\text{cm}^3$ ]	0,9											ISO 845
Unit weight [ $\text{g}/\text{m}^2$ ]	49,5	54,0	58,5	63,0	67,5	72,0	81,0	90,0	99,0	135,0	148,5	ISO 536
Packaging capability [ $\text{m}^2/\text{kg}$ ]	20,2	18,5	17,1	15,9	14,8	13,9	12,3	11,1	10,1	7,4	6,7	ISO 536
Tensile strength [ $\text{N}/\text{mm}^2$ ] - MD, not less than - TD, not less than	30 21	30 21	30 21	32 22	32 22	34 22	34 23	35 24	34 23	30 24	28 23	ISO 527 -1, -3
Elongation at break [%] - MD, not less than - TD, not less than	500 580	500 580	510 600	530 600	550 600	570 600	560 620	560 620	550 640	550 650	600 700	
Coefficient of friction (film/film), NT/NT, not more than	0,35											ISO 8295
Haze* [%], no more than	4,2	4,4	4,6	4,8	4,9	5,0	5,4	6,0	6,4	9,0	12,0	ASTM D 1003
Gloss (45°)* [%], not less than	88											ASTM D 2457
Treatment [ $\text{mN}/\text{m}$ ], not less than	36											ISO 8296
Lamination and print usability	tak											MW/Veroni-Pak/01
Sealing temperature range [ $^{\circ}\text{C}$ ]**	125-150											

\* / Test performed directly after the extrusion.

\*\* / Tested in laboratory conditions. Industrial sealing temperature depends on a type of sealing electrode and speed of the sealing/ welding process.

Ability for printing and lamination is checked with a test ink. Film is suitable for printing/ lamination only if the layer of a test ink is a homogenous, continuous and indelible area after it dries out. Ability for printing/ lamination is guaranteed for the period of 3 months from the manufacturing date indicated on the label attached to every roll. Other parameters listed above are guaranteed for the period of 6 months from the manufacturing date.

IMPORTANT: If the film is stored in the temperature below  $15^{\circ}\text{C}$ , it requires additional conditioning in the processing temperature  $\geq 20^{\circ}\text{C}$  during min. 24h. The manufacturer recommends the following film processing conditions: temperature:  $15 - 35^{\circ}\text{C}$ , humidity: max. 75% Rh. Compliance with these conditions ensures specified properties of the film and flawless processability.

The technical parameters in the table are based on laboratory tests and are for informative purposes only.

Veroni-Pak reserves the right to amend them.

All the parameters' values given in these tables above apply only to unprocessed film.

It is necessary to validate VerCAST film at every stage in the actual processing conditions.

We also recommend to validate the film as a part of a finished packaging in the conditions of its final destination.

The film is fully recyclable with standard recycling systems.