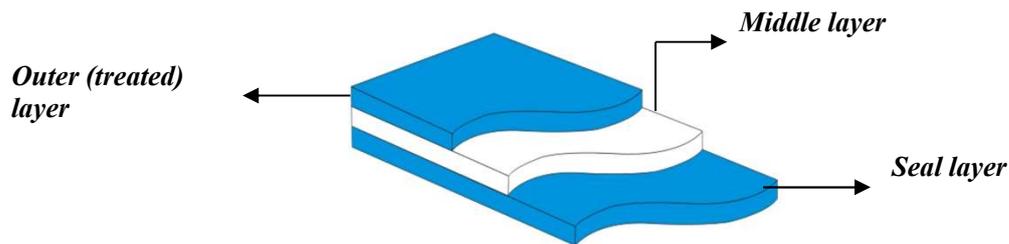


## TECHNICAL SPECIFICATION

# ML531

### CONSTRUCTION



### FEATURES AND APPLICATIONS

- Suitable for high speed machines.
- Suitable for both HFFS and VFFS machines.
- Suitable for PET, OPP, PVC, Metallized PET, Metalized OPP, Al, OPA or paper lamination.
- Improved tear and puncture resistance.
- Improved Hot-tack properties.
- High gloss value.
- Suitable for powdered food packaging.

### CERTIFICATION

Films comply with the requirements "COMMISSION REGULATION (EU) No 10/2011 on plastic materials and articles intended to come into contact with food". All films are produced in ISO 9001, ISO14001 certified facilities and have been approved by the British Retail Consortium (BRC).

### PRODUCT and FOOD SAFETY

For more information please request Material Safety Data Sheet (MSDS) and Food Contact Declaration.

### SHELF LIFE and STORAGE

The shelf life of the product is 6 months after production if it is stored in dry conditions, away from exposure to direct sunlight and at normal room conditions.

PROPERTIES								
Parameter	Unit		Value				Test Method	
Thickness	micron		20	25	28	30	BAREKS TEST	
	gauge		80	100	112	120		
Density	g/cm <sup>3</sup>		0,927	0,927	0,927	0,927	BAREKS TEST	
Yield	m <sup>2</sup> /kg		53,94	43,15	38,53	35,96	BAREKS TEST	
CoF	In / In		≤ 0,3				ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	14,2	15,8	17,2	17,2	ASTM D882
	TD		± 6	11,5	13	13,2	13,2	
Elongation at Break	MD	mm	± 100	120	190	210	210	ASTM D882
	TD		± 100	250	310	370	370	
Seal Strength / Elongation	3 bar 130°C 0,8 sec	N /25 mm	± 3	13,5	14,3	17	17	BAREKS TEST
		mm	± 50	70	90	110	110	
Gloss	≥%		80	80	80	80	ASTM D2457	
Haze	≤%		16	16	16	16	ASTM D1003	
Clarity	≥%		90	90	90	90		
Transmittance	≥%		85	85	85	85		

The above information is the result of laboratory tests, which are applied on samples from standard production. Since the varying conditions under which our products used are beyond our control, all of the above results are without guarantee and warranty. Users are advised to conduct their own testing of our products to determine suitability for use alone or in combination with other products.

PROPERTIES								
Parameter	Unit		Value				Test Method	
Thickness	micron		35	40	45	50	BAREKS TEST	
	gauge		140	160	180	200		
Density	g/cm <sup>3</sup>		0,927	0,927	0,927	0,927	BAREKS TEST	
Yield	m <sup>2</sup> /kg		30,82	26,97	23,97	21,57	BAREKS TEST	
CoF	In / In		≤ 0,3				ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	22,1	24,6	28	28,2	ASTM D882
	TD		± 6	16,3	18,4	24,6	25,1	
Elongation at Break	MD	mm	± 100	250	270	290	320	ASTM D882
	TD		± 100	370	375	400	420	
Seal Strength / Elongation	3 bar 130°C 0,8 sec	N /25 mm	± 3	17,5	18	20	20,6	BAREKS TEST
		mm	± 50	150	160	170	175	
Gloss	≥%		80	80	80	80	ASTM D2457	
Haze	≤%		16	16	16	16	ASTM D1003	
Clarity	≥%		90	90	90	90		
Transmittance	≥%		85	85	85	85		

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PROPERTIES								
Parameter	Unit		Value				Test Method	
Thickness	micron		50	60	65	70	BAREKS TEST	
	gauge		200	240	260	280		
Density	g/cm <sup>3</sup>		0,927	0,927	0,927	0,927	BAREKS TEST	
Yield	m <sup>2</sup> /kg		21,57	17,98	16,60	15,41	BAREKS TEST	
CoF	ln / ln		≤ 0,3				ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	28,2	32,00	39	43	ASTM D882
	TD		± 6	25,1	27,2	29	35	
Elongation at Break	MD	mm	± 100	320	325	355	400	ASTM D882
	TD		± 100	420	430	490	520	
Seal Strength / Elongation	3 bar 130°C 0,8 sec	N /25 mm	± 3	20,6	23,1	26	26,8	BAREKS TEST
		mm	± 50	175	175	180	180	
Gloss	≥%		80	80	80	80	ASTM D2457	
Haze	≤%		16	16	16	16	ASTM D1003	
Clarity	≥%		90	90	90	90		
Transmittance	≥%		85	85	85	85		

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PROPERTIES								
Parameter	Unit		Value				Test Method	
Thickness	micron		80	85	90	100	BAREKS TEST	
	gauge		320	340	360	400		
Density	g/cm <sup>3</sup>		0,927	0,927	0,927	0,927	BAREKS TEST	
Yield	m <sup>2</sup> /kg		13,48	12,69	11,99	10,79	BAREKS TEST	
CoF	In / In		≤ 0,3				ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	54,8	55	56	60,1	ASTM D882
	TD		± 6	44	48	50	56,3	
Elongation at Break	MD	mm	± 100	420	430	440	450	ASTM D882
	TD		± 100	530	540	570	570	
Seal Strength / Elongation	3 bar 130°C 0,8 sec	N /25 mm	± 3	30,2	32	33	35	BAREKS TEST
		mm	± 50	180	180	190	200	
Gloss	≥%		80	80	80	80	ASTM D2457	
Haze	≤%		16	16	16	23	ASTM D1003	
Clarity	≥%		90	90	90	90		
Transmittance	≥%		85	85	85	85		

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PROPERTIES						
Parameter	Unit		Value		Test Method	
Thickness	micron		105	120	BAREKS TEST	
	gauge		420	480		
Density	g/cm <sup>3</sup>		0,927	0,927	BAREKS TEST	
Yield	m <sup>2</sup> /kg		10,27	8,99	BAREKS TEST	
CoF	ln / ln		≤ 0,3		ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	70	77	ASTM D882
	TD		± 6	63	65	
Elongation at Break	MD	mm	± 100	500	520	ASTM D882
	TD		± 100	570	580	
Seal Strength / Elongation	3 bar 130°C 0,8 sec	N /25 mm	± 3	41	41,5	BAREKS TEST
		mm	± 50	210	210	
Gloss	≥%		80	80	ASTM D2457	
Haze	≤%		23	23	ASTM D1003	
Clarity	≥%		90	90		
Transmittance	≥%		85	85		

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