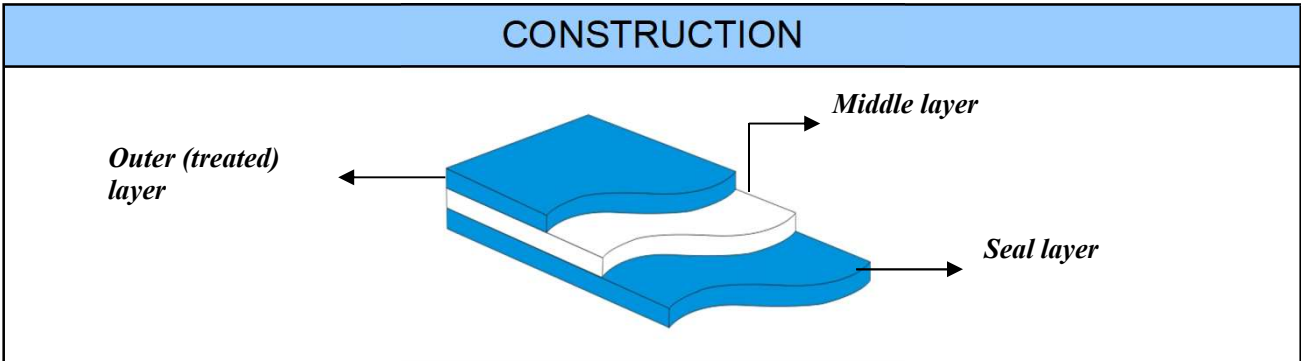


TECHNICAL SPECIFICATION

ML53



- FEATURES AND APPLICATIONS**
- Suitable for PET, OPP, PVC, Metallized PET, Metallized OPP, Al, OPA or Paper lamination.
 - Improved sealing strength.
 - Improved Hot-tack properties.
 - Improved tear and puncture resistance.
 - Suitable for high speed machines.

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		25	30	35	40	BAREKS TEST	
	gauge		100	120	140	160		
Density	g/cm ³		0,927	0,927	0,927	0,927	BAREKS TEST	
Yield	m ² /kg		43,15	35,96	30,82	26,97	BAREKS TEST	
CoF	ln / ln		≤ 0,3				ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	13,7	19	21	22,4	ASTM D882
	TD		± 6	10,9	12	14,1	15	
Elongation at Break	MD	mm	± 100	140	140	150	150	ASTM D882
	TD		± 100	320	330	340	345	
Seal Strength / Elongation	3 bar 130°C 0,8 sn	N /25 mm	± 3	12	18	20	20,7	BAREKS TEST
		mm	± 50	110	130	135	135	
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		45	50	55	BAREKS TEST	
	gauge		180	200	220		
Density	g/cm ³		0,927	0,927	0,927	BAREKS TEST	
Yield	m ² /kg		23,97	21,57	19,61	BAREKS TEST	
CoF	ln / ln		≤ 0,3			ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	23	25	26,7	ASTM D882
	TD		± 6	18	20	22	
Elongation at Break	MD	mm	± 100	155	165	170	ASTM D882
	TD		± 100	350	380	390	
Seal Strength / Elongation	3 bar 130°C 0,8 sn	N /25 mm	± 3	21,6	22,2	22,5	BAREKS TEST
		mm	± 50	140	145	150	
Gloss	≥%		80	80	80	ASTM D2457	
Haze	≤%		16	16	16	ASTM D1003	
Clarity	≥%		90	90	90		
Transmittance	≥%		85	85	85		

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PROPERTIES							
Parameter	Unit		Value			Test Method	
Thickness	micron		60	65	70	BAREKS TEST	
	gauge		240	260	280		
Density	g/cm ³		0,927	0,927	0,927	BAREKS TEST	
Yield	m ² /kg		17,98	16,60	15,41	BAREKS TEST	
CoF	ln / ln		≤ 0,3			ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	33,2	34,5	35,1	ASTM D882
	TD		± 6	25	27	28,1	
Elongation at Break	MD	mm	± 100	200	220	250	ASTM D882
	TD		± 100	430	440	470	
Seal Strength / Elongation	3 bar 130°C 0,8 sn	N /25 mm	± 3	25,5	28	29	BAREKS TEST
		mm	± 50	150	150	155	
Gloss	≥%		80	80	80	ASTM D2457	
Haze	≤%		16	16	16	ASTM D1003	
Clarity	≥%		90	90	90		
Transmittance	≥%		85	85	85		

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PROPERTIES							
Parameter	Unit		Value			Test Method	
Thickness	micron		75	80	90	BAREKS TEST	
	gauge		300	320	360		
Density	g/cm ³		0,927	0,927	0,927	BAREKS TEST	
Yield	m ² /kg		14,38	13,48	11,99	BAREKS TEST	
CoF	ln / ln		≤ 0,3			ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	37	46	48	ASTM D882
	TD		± 6	30	40	42	
Elongation at Break	MD	mm	± 100	320	350	350	ASTM D882
	TD		± 100	480	500	500	
Seal Strength / Elongation	3 bar 130°C 0,8 sn	N /25 mm	± 3	30	31	35	BAREKS TEST
		mm	± 50	155	160	160	
Gloss	≥%		80	80	80	ASTM D2457	
Haze	≤%		16	18	18	ASTM D1003	
Clarity	≥%		90	90	90		
Transmittance	≥%		85	85	85		

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PROPERTIES						
Parameter	Unit		Value		Test Method	
Thickness	micron		100	110	BAREKS TEST	
	gauge		400	440		
Density	g/cm ³		0,927	0,927	BAREKS TEST	
Yield	m ² /kg		10,79	9,81	BAREKS TEST	
CoF	ln / ln		≤ 0,3		ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	59,2	60	ASTM D882
	TD		± 6	51,3	56	
Elongation at Break	MD	mm	± 100	410	410	ASTM D882
	TD		± 100	510	520	
Seal Strength / Elongation	3 bar 130°C 0,8 sn	N /25 mm	± 3	39,2	43	BAREKS TEST
		mm	± 50	165	165	
Gloss	≥%		80	80	ASTM D2457	
Haze	≤%		20	20	ASTM D1003	
Clarity	≥%		90	90		
Transmittance	≥%		85	85		

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PROPERTIES								
Parameter	Unit		Value				Test Method	
Thickness	micron		120	130	140	150	BAREKS TEST	
	gauge		480	520	560	600		
Density	g/cm ³		0,927	0,927	0,927	0,927	BAREKS TEST	
Yield	m ² /kg		8,99	8,30	7,71	7,19	BAREKS TEST	
CoF	ln / ln		≤ 0,3				ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	64,8	71,2	84	85	ASTM D882
	TD		± 6	56,2	61	64	65	
Elongation at Break	MD	mm	± 100	450	470	480	550	ASTM D882
	TD		± 100	520	550	565	570	
Seal Strength / Elongation	3 bar 130°C 0,8 sn	N /25 mm	± 3	43,1	45	47	48	BAREKS TEST
		mm	± 50	160	170	170	170	
Gloss	≥%		80	80	80	80	ASTM D2457	
Haze	≤%		23	23	26	26	ASTM D1003	
Clarity	≥%		90	90	90	90		
Transmittance	≥%		85	85	85	85		

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PROPERTIES						
Parameter	Unit		Value		Test Method	
Thickness	micron		165	175	BAREKS TEST	
	gauge		660	700		
Density	g/cm ³		0,927	0,927	BAREKS TEST	
Yield	m ² /kg		6,54	6,16	BAREKS TEST	
CoF	ln / ln		≤ 0,3		ASTM D1894	
Tensile Strength	MD	N /25 mm	± 6	88	97,1	ASTM D882
	TD		± 6	67		
Elongation at Break	MD	mm	± 100	560	560	ASTM D882
	TD		± 100	580		
Seal Strength / Elongation	3 bar 130°C 0,8 sn	N /25 mm	± 3	48,8	56	BAREKS TEST
		mm	± 50	170	170	
Gloss	≥%		80	80	ASTM D2457	
Haze	≤%		26	26	ASTM D1003	
Clarity	≥%		90	90		
Transmittance	≥%		85	85		

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