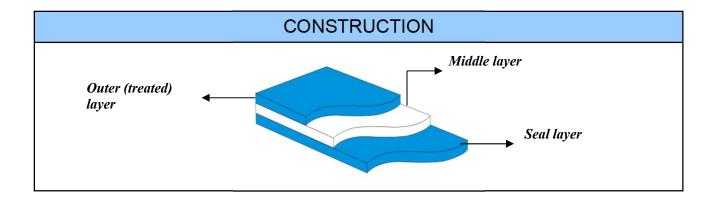


TECHNICAL SPECIFICATION

ML1161



FEATURES AND APPLICATIONS

- mLLDPE (metalosen) / LLDPE / LDPE blend.
- Suitable for PET, OPP, PVC, Metallize PET, Metalize OPP, Al, OPA or Paper lamination.
- Excellent sealing strength.
- · Improved Hot-tack property.
- · Improved stiffness.
- Improved dart drop and tear resistance.
- · Especially suggested for doy-pack 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, ISO 14001 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				Test Method				
Thickness		micron		20	25	30	35	BAREKS TEST	
THICKHESS		gauge		80	100	120	140	BARENS TEST	
Density		g/cm³		0,924	0,924	0,924	0,924	BAREKS TEST	
Yield	m²/kg			54,11	43,29	36,08	30,92	BAREKS TEST	
CoF	In / In				ASTM D1894				
Tensile Strength	MD	N /25	± 6	15,1	17,5	19,8	23	ASTM D882	
Tensile Strength	TD	mm	± 6	10,3	14,6	15,2	16	ASTNI DOOZ	
Elongation at	MD	mm	± 100	132	140	150	150	-ASTM D882	
Break	TD		± 100	260	290	300	300		
Seal Strength /	3 bar 130°C	N /25 mm	± 3	10,6	12,5	13,5	17	BAREKS TEST	
Elongation	0,8 sn	mm	± 50	70	70	75	75	DANERO TEOT	
Gloss	≥%			75	75	75	75	ASTM D2457	
Haze	≤%			16	16	16	16		
Clarity	≥%			90	90	90	90	ASTM D1003	
Transmittance		≥%		85	85	85	85		



PROPERTIES																						
Parameter	Unit				Test Method																	
Thickness		micron		40	45	50	BAREKS TEST															
THICKHESS		gauge		160	180	200	DANENO IESI															
Density		g/cm³		0,924	0,921	0,921	BAREKS TEST															
Yield	m²/kg			27,06	24,13	21,72	BAREKS TEST															
CoF	In / In			≤ 0,3			ASTM D1894															
Tensile Strength	MD	N /25 mm	± 6	24	26,7	30	-ASTM D882															
Terisile Strength	TD		± 6	17	21,9	22																
Elongation at	MD	mm	± 100	160	162	165	ASTM D882															
Break	TD		± 100	340	350	400																
Seal Strength /	3 bar 130°C	N /25 mm	± 3	21	23,8	26	BAREKS TEST															
Elongation	0,8 sn																mm	± 50	80	85	100	BARERO TEST
Gloss	≥%			75	75	75	ASTM D2457															
Haze	≤%			16	16	16																
Clarity	≥%			90	90	90	ASTM D1003															
Transmittance		≥%		85	85	85																



PROPERTIES												
Parameter	Unit				Value							
Thickness		micron		55	60	65	BAREKS TEST					
THICKHESS		gauge		220	240	260	DANENS TEST					
Density		g/cm³		0,921	0,921	0,921	BAREKS TEST					
Yield	m²/kg			19,74	18,10	16,70	BAREKS TEST					
CoF	In / In			≤ 0,3			ASTM D1894					
Tensile Strength	MD	N /25 mm	± 6	32,8	35,2	40,1	-ASTM D882					
Tensile Strength	TD		± 6	26	26,1	33,5						
Elongation at	MD	mm	± 100	170	190	200	ASTM D882					
Break	TD		± 100	460	520	525						
Seal Strength /	3 bar 130°C	N /25 mm	± 3	26,9	27,5	31	BAREKS TEST					
Elongation	0,8 sn						mm	± 50	110	120	122	BANERO ILOI
Gloss	≥%			75	75	75	ASTM D2457					
Haze	≤%			16	16	16						
Clarity	≥%			90	90	90	ASTM D1003					
Transmittance		≥%		85	85	85						



PROPERTIES																								
Parameter	Unit				Value																			
Thickness		micron		70	75	80	90	BAREKS TEST																
THICKHESS		gauge		280	300	320	360	BARERS TEST																
Density		g/cm³		0,921	0,921	0,921	0,921	BAREKS TEST																
Yield	m²/kg			15,51	14,48	13,57	12,06	BAREKS TEST																
CoF	In / In				≤ 0,3																			
Tensile Strength	MD	N /25 mm	± 6	40,5	42,2	44,3	46,5	-ASTM D882																
Tensile Strength	TD		± 6	35,2	39,4	39,4	41,1																	
Elongation at	MD	mm	± 100	240	270	270	300	-ASTM D882																
Break	TD		± 100	530	550	550	560																	
Seal Strength /	3 bar 130°C	N /25 mm	± 3	31,5	32,9	33	34	BAREKS TEST																
Elongation	0,8 sn																	mm	± 50	125	128	130	135	DANENO IEOI
Gloss	≥%			75	75	75	75	ASTM D2457																
Haze	≤%			16	16	16	18																	
Clarity	≥%			90	90	90	90	ASTM D1003																
Transmittance		≥%		85	85	85	85																	



PROPERTIES										
Parameter	Unit				Value					
Thickness		micron		95	100	105	110	BAREKS TEST		
THICKHESS		gauge		380	400	420	440	DARENS TEST		
Density		g/cm³		0,921	0,921	0,921	0,921	BAREKS TEST		
Yield	m²/kg			11,43	10,86	10,34	9,87	BAREKS TEST		
CoF	In / In				ASTM D1894					
Tensile Strength	MD	N /25 mm	± 6	50,4	55,5	58	58,5	-ASTM D882		
Tensile Strength	TD		± 6	42,8	45,2	47	48,3			
Elongation at	MD	mm	± 100	330	420	425	470	-ASTM D882		
Break	TD		± 100	565	570	575	580			
Seal Strength /	3 bar 130°C	N /25 mm	± 3	37,8	40	41	41,4	BAREKS TEST		
Elongation	0,8 sn	mm	± 50	140	150	155	160	DANENS 1EST		
Gloss	≥%			75	75	75	75	ASTM D2457		
Haze	≤%			18	20	20	23			
Clarity	≥%			90	90	90	90	ASTM D1003		
Transmittance		≥%		85	85	85	85]		



PROPERTIES									
Parameter	Unit				Value				
Thickness		micron		115	120	130	BAREKS TEST		
THICKHESS		gauge		460	480	520	DANENS TEST		
Density		g/cm³		0,921	0,921	0,921	BAREKS TEST		
Yield	m²/kg			9,44	9,05	8,35	BAREKS TEST		
CoF	In / In			≤ 0,3			ASTM D1894		
Tensile Strength	MD	N /25 mm	± 6	65,1	67,4	79,3	-ASTM D882		
Tensile Strength	TD		± 6	55,5	57,5	67,3			
Elongation at	MD	mm	± 100	515	520	535	-ASTM D882		
Break	TD		± 100	585	590	595			
Seal Strength /	3 bar 130°C	N /25 mm	± 3	41,6	44,7	44,8	BAREKS TEST		
Elongation	0,8 sn	mm	± 50	165	170	180	DAILENO ILOI		
Gloss	≥%			75	75	75	ASTM D2457		
Haze	≤%			23	23	26			
Clarity	≥%			90	90	90	ASTM D1003		
Transmittance		≥%		85	85	85			



PROPERTIES									
Parameter	Unit			Va	Test Metod				
Thickness	micron			140	150	BAREKS TEST			
THICKHESS		gauge		560	600	DANENO IEST			
Density		g/cm³		0,921	0,921	BAREKS TEST			
Yield	m²/kg			7,76	7,24	BAREKS TEST			
CoF	In / In			≤ (ASTM D1894				
Tensile Strength	MD	N /25	± 6	84	87	ASTM D882			
Tensile Strength	TD	mm	± 6	69	70	AS TWI DOOZ			
Elongation at	MD	mm	± 100	535	540	ASTM D882			
Break	TD	'''''	± 100	595	600	ASTIVI DOOZ			
Seal Strength /	3 bar 130°C	N /25 mm	± 3	47	49,2	BAREKS TEST			
Elongation	0,8 sn mm		± 50	190	235	DAILENO ILOI			
Gloss	≥%			75	75	ASTM D2457			
Haze	≤%			26	26				
Clarity	≥%			90	90	ASTM D1003			
Transmittance		≥%		85	85				