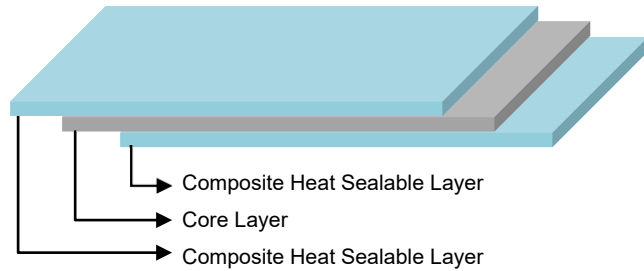


TECHNICAL DATASHEET FOR HEAT SEALABLE BIO411 PLA FILMS

Structure



Description

PLA (Polylactic Acid) transparent film, both sides heat sealable, biodegradable.

Environmental

- 100% Biodegradable.
- Certified EN13432 and ASTM D6400 for compostable intermediates. This logo can be used for final products:
- Compliant with EU and FDA requirements for food contact.



Properties

- Strong and air tight gusset and fin seals.
- Low S.I.T. (Seal Initiation Temperature).
- Good mechanical properties.
- High stiffness.
- Resistant to oil, fat and alcohol.
- Excellent twist retention.

Applications

- Replacement of PE sealants.
- Single web structure.
- Suitable for HFFS and VFFS applications.
- Twist and Dead Fold applications.
- Window film for bags and pouches.
- Suitable for flow wrapping applications.

TECHNICAL DATASHEET FOR HEAT SEALABLE BIO411 PLA FILMS

Properties	Units	Notes	Test Method	Thickness (μm)						
				9	12	15	20	25	30	40
Physical & Optical Data										
Thickness Variation	% (+/-)		ASTM D374	5%						
Film Density	g/cc		ASTM D4321	1.24						
Mass Per Unit Area	g/m ²		ASTM D4321	11.2	14.9	18.6	24.8	31.0	37.2	49.6
Yield	m ² /kg		ASTM D4321	89.6	67.3	53.8	40.3	32.3	26.9	20.2
Kinetic COF		film/film	ASTM D1894	0.5						
		film/metal		0.3						
Haze	%		ASTM D1003	< 5%						< 8%
Gloss @ 60°	GU		ASTM D532	110						
Mechanical Data										
Tensile Strength	N/mm ²	MD	ASTM D882	65.5						
		TD		68.9						
Modulus	N/mm ²	MD	ASTM D882	1910						
		TD		1950						
Thermal Data										
S.I.T. (Seal Init Temp)	°C			65		93	82	82	93	
Heat Seal Strength	N/15mm			10.6		14.7	16.7	16.7	14.7	
Barrier Data										
WVTR (Water Vapor Trans Rate)	g/m ² /24h	at 38 °C / 90% R.H.	ASTM F1249	730	550	440	340	290	230	185
OTR (Oxygen Transmission Rate)	g/m ² /24h	at 23 °C / 85% R.H.	ASTM F3985	1310	980	780	600	510	400	310
CO ₂ TR (Carbon Dioxide Trans Rate)	g/m ² /24h	at 23 °C / 50% R.H.	ASTM F2476	7100	5300	4200	3200	2500	2100	1500

MD: Machine Direction; **TD:** Transverse Direction