

PRODUCT DATA SHEET

ENVIPLAST FILM

- DESCRIPTION** : Starch bio-based film.
- APPLICATION** : Bio-based shopping bags, poly-bags, garbage bags, and general packaging.
- DEGRADATION TIME AFTER DISPOSAL** : 3 - 6 Months

CHARACTERISTIC

1. Made from natural starch
2. Consumed by small animals and microorganism to be converted into carbon dioxide (CO₂), water (H₂O), and biomass in nature within months.
3. Dissolves in hot water and softens in cold water.
4. Very potential to be used as electronic components wrapping, where static electricity must be avoided.
5. Harmless when consumed by animals.
6. Safe for plant growth.

PHYSICAL PROPERTIES	METHOD	UNIT	TYPICAL VALUE
Appearance	Visual	-	Translucent to opaque film
Tensile Strength (MD)*	ASTM D882	MPa	12 - 18
Elongation at Break (MD)*	ASTM D882	%	150 - 200
Surface Resistivity	ASTM D257	Ohm/cm ²	10 ^{7.5} - 10 ¹⁰
Solubility in Water at 80 °C	Internal Method	g/L	200
Oxygen Transmission Rate	ASTM D3985	ml/100 in ² /day	0.0235

* MD : Machine Direction

CARRYING CAPACITY

No	Bag Type	Dimension (mm)			Load (Kg)
		Width	Length	Thickness	
1	Shopping Bags (T- shirt model) Small Size	160 ± 5	320 ± 5	0.03±0.002	1.5 - 2.5
2	Shopping Bags (T- shirt model) Medium Size	280 ± 5	500 ± 5	0.04±0.002	3 - 4
3	Shopping Bags (T- shirt model) Large Size	330 ± 5	500 ± 5	0.05±0.002	5 - 6
4	Shopping Bags (T- shirt model) X-Large Size	400 ± 5	600 ± 5	0.05±0.002	7 - 9
5	Garbage Bags, Small Size	400 ± 5	500 ± 5	0.04±0.002	4 - 5
6	Garbage Bags, Medium Size	600 ± 5	800 ± 5	0.05±0.002	6 - 7
7	Garbage Bags, Large Size	600 ± 5	1000 ± 5	0.05±0.002	8 - 9

Doc.No. 1401-00/PDS/film