



WrapTek Bio is made with special patented additives to make the film biodegradable complying with relevant industry standards that allow the film to break down in natural conditions after 2-3 years, as confirmed by the supplier of additives and evidenced in the reports by various international laboratories. It decomposes in the presence of bacteria and other microorganisms under natural conditions, producing water, CO<sub>2</sub>, and biomass. It is designed to return safely to the environment so it should be the preferred choice for anyone looking to go green.

## SIGNIFICANT PROPERTIES

### General Properties

- Contains an additive that initiates chemical breakdown more quickly and completely in the presence of oxygen and heat or UV light.
- Extensive abuse resistance of the film helps the products survive rough handling and damages due to multi-packaging.
- Exhibits superior transparency and gloss enhancing product appearance.

### Sealing Properties

- Ensures strong & durable seals.
- Operates on a wide sealing temperature range.
- Superior ease of use manually as well on high-speed automatic shrink equipment.

### Shrinking Properties

- Balanced shrink for tight and crisp packages.
- High burnout resistance enables sealing on multiple-end seal systems.
- Clean shrink appearance with excellent conformity of shrinkage & minimum dog-ears.
- Easy to run on most types of equipment.

## STANDARD PUT-UPS

- Available Thickness: 12, 15, 19, 25 microns as cross-linked and non-cross linked variants.
- Single Wound Flat Film is available in custom widths from 75mm to 2540mm in 6.5mm increments.
- Center Folded Film is available in custom widths from 75mm to 1270mm in 13mm increments.
- Pouches are available in lengths of 100mm to 2000mm and openings of 100mm to 1000mm
- Center Folded Film has half the linear footage of single-wound flat film for the same thickness (in microns) and roll dimensions.
- Available as hot perforated and printed options as well.

## APPLICATIONS

- Retail packaging
- Industrial packaging
- Bundling, Multipacking & Unitizing Products
- Medical Packaging

# TECHNICAL SPECIFICATIONS

Properties	ASTM Test Method	Unit	Thickness (Micron)			
			12	15	19	25
Haze (avg)	D1003	%	2.2	2.3	2.4	2.6
Gloss (at 20°) (min)	D2457	GU	135	130	130	125
COF, Kinetic	D1894	-	0.26	0.26	0.23	0.2
Shrinkage, 102°C (216°F)--10 min	D1204	% area	65	65	65	65
Shrink Force (100°C)	D2838	N/mm	0.036	0.042	0.05	0.061
Stiffness Modulus (avg)	D882	MPa	255	255	255	255
Tensile Strength (avg)	D882	MPa	89	89	89	89
Elongation (avg)	D882	%	120	125	130	135
Tear Strength (avg) (Elmendorf )	D1922	N	0.19	0.24	0.29	0.34
Spencer Impac	D3420	kgf	3.62	4.31	4.99	6.81
WVTR	F1249	g /h.m <sup>2</sup> / 24 hr	35.6	38.7	31.1	23.2
Oxygen Transmission	D3985	cc/m <sup>2</sup> /24 hr	64.4	58.1	51.5	38.6
CO2 Transmission	D1434	cc/m <sup>2</sup> /24 hr	161	155	142	126

Note: These values are typical data for Bagla-Group shrink film and are not product release specifications, warranties or limiting specifications. Values are based on initial production and tests run during development of this film.

## WrapTek Bio - Linear Footage of Center Folded Shrink Film

Core I.D. (mm)	Roll O.D. (mm)	Length (Meter)			
		12µm	15µm	19µm	25µm
76	242	5,826	4,370	3,500	2,624
76	330	11,652	8,740	7,000	5,248
152	280	5,826	4,370	3,500	2,624
152	356	11,652	8,740	7,000	5,248
152	476	23,304	17,480	14,000	10,496

Note: Single Wound Film has double the linear footage of center-fold film for the same thickness (in micron) and roll dimensions.

## DISPOSAL

- Recycle (Dry or Wet processing to extrude into pellets)
- Waste to Energy (WtE) through incineration (most desirable)
- Land fill

## STORAGE

- Storage below 32 degrees Celsius (90 degrees Fahrenheit) is recommended.



# ADDITIONAL INFORMATION

**SHELF LIFE:** The typical shelf life of our POF Shrink Films is about 5 years when stored properly.

**DISCLAIMER:** The technical data contained herein are guides to the use of Bagla® products. Bagla Group makes no guarantees of results and assumes no obligations or liability in connection with its advice.

### Head Office

- New Delhi

### Factories

- 3 in Mundra, India
- 1 in Kolkata, India
- 1 in Dadri, India
- 1 in Ciudad del Este, Paraguay
- 1 in Surabaya, Indonesia

### Domestic Sales Office

- Delhi • Mumbai • Kolkata • Cochin
- Bangalore • Hyderabad • Chennai • Bhopal

### Key Markets

- USA • Canada • Mexico • Germany
- UK • France • Italy • Spain
- Poland • Brazil • Argentina • Australia

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