



WrapTek Tough heavy gauge shrink films are the strongest shrink films on the market. This film can be used as a primary packaging medium for shipping products. It is a great alternative to bulky corrugate and heavy-gauge polyethylene packing material. This shrink film has unprecedented strength. It is also high-abuse and tamper resistant to ensure the product's protection during the most abusive distribution channels and still retain a great retail shelf appeal.

## SIGNIFICANT PROPERTIES



### General Properties

- Heavier Thickness.
- Abuse and Tamper Resistance.
- Increases production rates and throughputs.
- Minimizes packaging and labor costs.



### Sealing Properties

- High shrink force for bundling and multipacking.
- Strong, durable seals due to heavy film thickness.
- Conforms to irregular shapes.
- Excellent tear and puncture resistance.



### Shrinking Properties

- High shrink force for bundling and multipacking.
- Excellent resistance to burn-through.
- Compatible with all air evacuation systems.

Bagla Group Shrink Films comply with the requirements and regulations of FDA and USDA which states that materials may be used in food contact applications.

## STANDARD PUT-UPS

- Available Thickness: 200 and 300 gauge as cross-linked and non-cross linked variants.
- Single Wound Flat Film is available in custom widths from 3" to 100" in 1/4" increments.
- Center Folded Film is available in custom widths from 3" to 50" in 1/2" increments.
- Shrink Pouches are available in lengths of 4" to 80" and openings of 4" to 40".
- Center Folded Film has half the linear footage of single-wound flat film for the same thickness (in gauge) and roll dimensions.
- Available as hot perforated and printed options as well.

## APPLICATIONS

- Packaging Bulky Items
- Bundling Products
- E-commerce Products

# TECHNICAL SPECIFICATIONS

| Properties             | ASTM Test Method | Unit                         | Thickness (gauge) |     |
|------------------------|------------------|------------------------------|-------------------|-----|
|                        |                  |                              | 200               | 300 |
| Haze                   | D1003            | %                            | 4.5               | 6.5 |
| Gloss at 20°           | D2457            | GU                           | 130               | 120 |
| COF,Kinetic            | D1894            | -                            | 0.2               | 0.2 |
| Stiffness Modulus(avg) | D882             | kpsi                         | 47                | 36  |
| Tensile Strength(avg)  | D882             | kpsi                         | 15                | 13  |
| Elongation (avg)       | D882             | %                            | 170               | 185 |
| WVTR                   | F1249            | g/100 in <sup>2</sup> /24 hr | 0.5               | 0.3 |
| Tear Propagation       | D1938            | gms                          | 32                | 77  |
| PIR Content            | Internal         | %                            | 30                | 30  |

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 Tough - Linear Footage of Center Folded Shrink Film

| Core I.D.<br>(Inches) | Roll O.D.<br>(Inches) | Length (feet) |           |
|-----------------------|-----------------------|---------------|-----------|
|                       |                       | 200 gauge     | 300 gauge |
| 3                     | 9 <sup>1/2</sup>      | 1,180         | 1,060     |
| 3                     | 13                    | 2,360         | 2,120     |
| 6                     | 11                    | 1,180         | 1,060     |
| 6                     | 14                    | 2,360         | 2,120     |
| 6                     | 18 <sup>3/4</sup>     | 4,720         | 4,240     |

Note: Single Wound Film has double the linear footage of center-fold film for the same thickness (in gauge) 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

**bagla** GROUP  
Let's innovate Packaging!