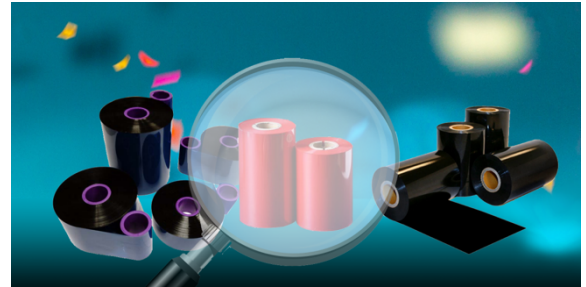


How to Select the Right Type of Thermal Transfer Ribbon (Barcode Ribbon) for Your Application

At IMP, our services go **beyond just selling products and providing technology solutions**. We share the best practices we have accumulated over the years to help our customers grow their business.

So how do you select the right type of thermal transfer ribbon for your thermal printing application?



- Each type of thermal transfer ribbon formulation has different performance characteristics which affect print quality, image durability and cost.
- **The key to choosing the correct type of thermal transfer ribbon (barcode ribbon) involves a clear understanding of end use application.**

Thermal Transfer Ribbon by Ribbon Formulation

[General Purpose Wax Thermal Transfer Ribbons](#)

Wax ribbons are the most economic ribbon solution and are primarily used to print onto paper labels.

Recommended Media: Coated and Uncoated Paper Label Stocks

APPLICATIONS:

- General purpose labeling
- Retail labels and tags
- Shipping, addressing, warehousing and receiving labeling
- Product identification

[Premium Resin-enhanced Wax Thermal Transfer Ribbons](#)

We offer several resin-enhanced wax-based ink formulas which provide high-quality printing at an economical price. Developed, designed and produced to printer manufacturers' strict specifications, these ribbons offer excellent print quality for normal and rotated bar codes and small characters. These ribbons can also print at speeds as high as 16 IPS. Premium wax ribbons offer the best all-around performance when considering print quality, image durability, high speed printing capability and wider receiver material latitude.

Applications include:

- Shipping labels
- Product Identification
- Logistics labels
- Retail labels & tags
- Cold Storage film labels
- Lumber Tags
- Flexible Packaging
- Use with High Speed Applicators
- Rotated barcodes

Wax-Resin Thermal Transfer Ribbons

Wax/Resin ribbons are a mix of both wax and resin, which gives the printed labels more durability than the wax ribbons. The combination of the two allows printing onto a variety of materials, such as synthetics, coated or glossy paper stocks, and waterproof materials.

Applications include:

- Shipping, addressing, warehousing and receiving labeling
- Shelf and bin labeling
- Compliance labeling
- Health care applications
- Textile and apparel applications
- Nursery and lumber applications
- Printing directly on flexible packaging films

Resin Thermal Transfer Ribbons

Resin ribbons contain the highest content of resin and provide the best overall image durability, resistance to heat, high abrasion, and harsh chemical exposure. Designed for printing on durable label materials, such as synthetics, PET, BOPP, and other film substrates. Our resin formulas are UL approved.

Applications include:

- Outdoor applications
- Textile and apparel applications
- Nursery and lumber applications
- Chemical drum labeling
- Medical and pharmaceutical labeling
- Industrial applications
- Automotive applications
- Printing directly on flexible packaging films

Near edge TTO

We offer several premium wax/resin and resin formulation designed for Near-edge printers and TTO applications.

Applications include:

- General purpose labeling
- Retail tag and label applications
- Shipping, addressing, warehousing and receiving labeling
- Outdoor applications
- Shelf and bin labeling
- Compliance labeling
- Textile and apparel applications
- Nursery and lumber applications
- Chemical drum labeling
- Medical and pharmaceutical labeling
- Industrial applications
- Automotive applications
- Printing directly on flexible packaging films

Thermal Transfer Barcode Ribbon by Printing Substrate Material

This chart below provides a high-level overview on the print material compatibility for each of our barcode ribbon formulations, wax, wax-resin and resin.

	WAX	WAX-RESIN	RESIN
TAG STOCKS			
Uncoated Tag	✓	✓	·
Coated Tag	✓	✓	·
PAPER LABEL STOCKS			
Coated Face Sheets	✓	✓	·
Uncoated Face Sheets	✓	✓	·
Gloss Sheets	✓	✓	·
ECONOMY SYNTHETICS			
Polypropylene	·	✓	?
Vinyl (Topcoat)	·	?	?
Polyethylene	·	?	?
Polystyrene	·	✓	✓
Polyolefin	✓	✓	✓
HIGH-END SYNTHETICS			
Polyesters (Gloss Topcoat)	·		✓
Polyesters (Matte Topcoat)	·	✓	✓
SPECIAL MATERIAL			
Tyvek	✓	✓	✓
Tyvek Brillion	✓	✓	✓
Valeron	✓	✓	✓
Polyimide			✓
PVC Shrink Wrap		✓	✓
Fabric Care Labels			✓



**INTERNATIONAL
MEDIA PRODUCTS**
Your TTR Experts

Established in 2013, IMP is headquartered in Atlanta, Georgia with a western distribution center in Los Angeles. IMP is the world's only vertically integrated manufacturer of thermal transfer and hot stamp ribbons – extruding our own PET base film and coating ribbons. This unique capability allows us to offer the best ribbon price/performance value in today's market.