

# 5100 Premium Resin

## Thermal Transfer Ribbon

### Description:

A premium resin ink formulation that produces images resistant to the harshest environments: smearing, moisture, abrasion, extreme temperature and chemicals when printed on Zebra's synthetic label and tag materials. This ribbon is UL Recognized and CSA Component Acceptable when used with Z-Ultimate® 3000 White and Z-Ultimate 3000 Silver™ label stock and any Zebra printer (except the Zebra Z-221 for CSA).

**UL Recognized** and **CSA Accepting Printing Systems** with the following materials:

- Z-Ultimate® 3000 White
- Z-Ultimate® 3000 Silver
- Z-Ultimate® Select 3000 White (UL Only)
- Z-Ultimate® Select 3000 Silver (UL Only)
- Z-Ultimate® 3000 Color



### Suggested Applications:

- High temperature, harsh environments requiring excellent print quality, print durability and label performance
- Printed circuit board applications
- Long term outdoor exposure
- Replacement for laminated labels
- Labeling applications requiring extreme resistance to chemicals

### Technical Specifications

5100 Premium	
Color	Black
Ink Formulation	Resin
Base Film	Polyester
Base Film Caliper	4.5 microns
Scanning Capabilities	IR and Visible Light
Ribbon Length(s) / Inner Core Width(s)	<b>450m</b> (1476 ft.) /25.4mm (1.0") <u>OR</u> <b>110m</b> (360 ft.) / 12.7mm (0.5")
Stocked Widths (450m length)	40, 60, 83, 89, 110, 131, 154, 174, 220mm (1.57", 2.36", 3.27", 3.50", 4.33", 5.16", 6.06", 6.85", 8.66")
Stocked Widths (110m length)	40, 60, 89, 110mm (1.57", 2.36", 3.50", 4.33")
Stocked Widths (74m length)	33, 57, 64, 84, 110mm (1.30", 2.24", 2.52", 3.31", 4.33")

Recommended Storage Conditions:

23°F to 104°F (-5°C to 40°C) at 20% to 85% RH



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## 5100 Bar Code Scannability

The below scannability testing was performed on Z4000, 140Xi, 140XiII, 90XiII, 170Xi, 105S, and Stripe 500.

Label Facestock	Print Speed	Bar Code	Lab Results
Coated Paper Labels and Tags	Not recommended		
Synthetics	Up to 4 ips	10 mil normal code	Typical ANSI Grade A
Coated Paper Labels and Tags	Not recommended		
Synthetics	Up to 4 ips	15 mil rotated code	Typical ANSI Grade B

## 5100 Performance Analysis

All of the below tests were performed using 10 cycles (20 rubs) with the crockmeter.

Test Solvents	Z-Ultimate® 3000 White	Z-Xtreme™ 4000 White
Glass Cleaner w/Ammonia	*	*
Formula 409*	*	*
Skydrol*	*	✓
Motor Oil	*	*
Brake Fluid	*	*
Gunk Degreaser*	*	*
WD-40*	*	*
Genesolv*		
Rho-Tron*	✓	
Hexane	*	*
Xylene		
Gasoline		
Acetone		
Alcohol (90% Isopropyl Alcohol)	*	*

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- \* Scanning receives a "B" ANSI grade or better
- ✓ Scanning receives a "F" ANSI grade or better
- ☐ Barcode does not scan

All products should be pre-tested to ensure it meets all intended requirements of specific end-use applications. For testing of this product, please order sample ribbon 5100BK08005.

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