

5100 Premium Resin

Ribbon	Ribbon Type		Compatible Material	Print Speed	Temperature Resistance	Smear/Scratch Resistance	Chemical Resistance
2300	Wax	Standard	Uncoated/Coated Paper	██████████	██████████	██████████	██████████
2100	Wax	High-Performance	Uncoated/Coated Paper	██████████	██████████	██████████	██████████
3400	Wax/Resin	High-Performance	Uncoated/Coated Paper Matte Synthetics	██████████	██████████	██████████	██████████
3200	Wax/Resin	Premium	Uncoated/Coated Paper Matte Synthetics	██████████	██████████	██████████	██████████
4800	Resin	Performance	Matte/Gloss Synthetics	██████████	██████████	██████████	██████████
5095	Resin	High-Performance	Matte/Gloss Synthetics	██████████	██████████	██████████	██████████
5100	Resin	Premium	Matte/Gloss Synthetics	██████████	██████████	██████████	██████████
Image Lock™	Resin	Specialist	Z-Xtreme™ 5000T	██████████	██████████	██████████	██████████

Additional Features

- Premium resin ribbon for use on matte and gloss synthetics which provides excellent print quality and durability
- Ultra high temperature resistance in combination with Z-Supreme label material
- Exceptional extreme chemical and outdoor element resistance
- Excellent smear and scratch resistance on both matte and gloss synthetics

Suggested Applications

- High temperature and harsh environments that require excellent print quality, print durability and label performance
- Printed circuit board applications
- Laboratory slide labelling
- Replacement for laminate labels
- Labelling applications requiring extreme resistance to harsh chemicals

UL Recognised and CSA Certified

UL and CSA approved for use with the following materials:

- Z-Ultimate™ 3000T White
- Z-Ultimate™ 3000T Silver
- Z-Xtreme™ 4000T White
- Z-Xtreme™ 4000T White High-Tack
- Z-Xtreme™ 4000T Silver High-Tack



UL approved for use with the following materials:

- Z-Ultimate™ 2500T White
- Z-Ultimate™ 3000T Yellow
- Z-Ultimate™ 3000T High-Tack
- Z-Supreme™ 4000T White
- Z-Supreme™ 4000T White ESD
- Z-Supreme™ 4200T Yellow



Ribbon Compliance

Compliance	Image Lock
REACH/ Substances of Very High Concern (SVHC)	✓
RoHS	✓
Dodd-Frank Act (Conflict Minerals)	
Toxic Substances Control Act of 1976	✓
Carcinogenic, Mutagenic and Reprotoxic, or Substances Toxic Substances 1976/769/ EC	
California Proposition 65	
FDA 21 CFR Part 175.300 – Indirect Food Contact – Resinous and Polymeric Coatings	
European Food Directive 1935/2004/EC	
Foodstuffs and Consumer Goods Act and LFGB approved	
Halogen free	
Latex free	
Animal derivatives free	
BP Free	✓

Technical Specifications

	Description
Colour	Black
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	6.6 microns \pm 10%
Scanning Capabilities	IR and Visible Light

Stocked Sizes Available for the following Zebra Printers:

Mid-range and high-performance thermal printers, Zebra engines, other legacy Zebra printers
(Other widths/lengths are available on request subject to minimum order quantities and lead times)

Recommended Storage Conditions:

1 year duration when stored at 5°C to 35°C at 45% to 85% RH

5100 Barcode Scannability

The below scannability testing was performed on a variety of mid-range and high-performance thermal printers.

Label Facestock	Print Speed	Barcode	Lab Results
Synthetics	Up to 152.4mm/sec	10 or 12 mil normal code	Typical ANSI Grade A
Synthetics	Up to 101.6mm/sec	15 mil normal code	Typical ANSI Grade B

Performance Analysis

All of the below tests were performed on Z-Xtreme™ 4000T White using 10 cycles (20 rubs) with the Crockmeter.

Test Solvents	Zebra 5100 Performance
Glass Cleaner w/Ammonia	✓
Formula 409	✓
Skydrol	^
Motor Oil	✓
Brake Fluid	✓
Gunk Degreaser	✓
WD-40	✓
Genesolv	
Rho-Tro	
Hexane	✓
Xylene	^
Gasoline	^
Acetone	
Alcohol (90% Isopropyl Alcohol)	✓

✓: Scanning received a “B” ANSI grade or above.

^ : Scanning received a “C” to “F” ANSI grade.

Blank: Barcode does not scan

Product Performance and Suitability

The information contained in this document is to be used for guidance only and is not intended for use in setting specifications. All purchasers of Zebra products shall be solely responsible for independently determining if the product conforms to all requirements of their unique application.

All products should be pre-tested to ensure they meet all intended requirements of specific end-use applications.

For testing of this ribbon on Zebra mid-range and high-performance printers please order part number 05100BK11005. For testing on other printer models, please contact your Supplies Specialist representative.