

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 ±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 | ٨ |
| Motor Oil | ✓ |
| Brake Fluid | ✓ |
| Gunk Degreaser | ✓ |
| WD-40 | ✓ |
| Genesolv | |
| Rho-Tro | |
| Hexane | ✓ |
| Xylene | ۸ |
| Gasoline | ۸ |
| 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.