# 5100 Premium Resin

## Thermal Transfer Ribbon

Description:

A premium resin ink formulation that produces images resistant to the harshest environments: smear, moisture, abrasion, extreme temperature and chemicals, when printed on Zebra's synthetic label and tag materials.

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

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

## 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.
- Labelling applications requiring extreme resistance to chemicals.

## Technical Specifications

| 5100 Premium Resin | |
|---|---|
| **Colour** | Black |
| **Ink Formulation** | Resin |
| **Base Film** | Polyester |
| **Base Film Caliper** | 4.5 microns |
| **Scanning Capabilities** | IR and Visible Light |
| **Ribbon Length(s)** | 450 metres  /  16 metre cassettes for PT403 printers |
| **Stocked Widths (mm)** | 40, 60, 83, 89, 110, 154mm  / 110mm cassettes |

**Recommended Storage Conditions:**     One year duration when stored at -5°C to 40°C (23°F to 104°F) at 20% to 85% RH

## 5100 Bar Code Scannability

The below scannability testing was performed on 140X*i*III, 90X*i*III and 170XiIII.

| Label Facestock | Print Speed | Bar Code | 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 rotated 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 |
|---|---|
| Glass Cleaner w/Ammonia | ✓ |
| Formula 409 | ✓ |
| Skydrol | X |
| Motor Oil | ✓ |
| Brake Fluid | ✓ |
| Gunk Degreaser | ✓ |
| WD-40 | ✓ |
| Genesolv | |
| Rho-Tron | |
| Hexane | ✓ |
| Xylene | X |
| Gasoline | X |
| Acetone | |
| Alcohol (90% Isopropyl Alcohol) | ✓ |

✓  Scanning receives a "B" ANSI grade or better

x  Scanning receives a "F" ANSI grade or better

☐  Barcode does not scan

Note: All products should be pre-tested to ensure that they meet all intended requirements of specific end-use applications.  For testing of this product on Zebra industrial mid-range and high-end printers, please order part number **05100BK08305.**   For a full, up-to-date list of parts available for all Zebra printers, please contact your authorized Zebra reseller.