



Available
from stock
on ZipShip

3400 High-Performance Wax/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

- High-performance wax/resin which offers excellent print quality on a wide range of uncoated and coated papers, and many matte synthetics
- Ability to print up to 203mm/sec (8ips) for normal and rotated barcodes
- Provides good abrasion and some solvent resistance
- Produces excellent dense barcodes and high-resolution graphics

Suggested Applications

- Labels exposed to heat, steam, solvents, abrasion and friction
- Outdoor labelling applications in harsh environments
- Steel mill tags
- Automotive labels
- Industrial rating plates

UL Recognised

UL approved for use with the following materials:

- Z-Xtreme™ 4000T White High-Tack
- Z-Xtreme™ 4000T Silver High-Tack
- 8000T Void Matte



Technical Specifications

	Description
Colour	Black
Base Film	Polyester
Base Film Caliper	4 microns
Total Caliper	9.5 microns ±10%
Scanning Capabilities	IR and Visible Light

Ribbon Compliance

Compliance	3400
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	✓

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 40°C at 20% to 85% RH

3400 Barcode Scannability

The below scannability testing was performed on 140XiII, 90XiIII, 105SL and Z4M.

Label Facestock	Print Speed	Barcode	Lab Results
Coated paper labels and tags	Up to 203.2mm/sec	10 mil normal code	Typical ANSI Grade A
Coated matte synthetics	Up to 203.2mm/sec	10 mil normal code	Typical ANSI Grade B
Uncoated paper labels and tags	Up to 152.4mm/sec	10 mil normal code	Typical ANSI Grade C
Coated paper labels and tags	Up to 203.2mm/sec	15 mil rotated code	Typical ANSI Grade B
Coated matte synthetics	Up to 152.4mm/sec	15 mil rotated code	Typical ANSI Grade B

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 03400BK11005. For testing on other printer models, please contact your Supplies Specialist representative.

3200 Premium Wax/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

- Extremely versatile, suitable for a wide variety of materials. Can be used on both paper and synthetics, reducing the need to stock multiple ribbons
- Good smear and scratch resistance on Zebra paper and matte synthetic labels
- Can achieve high print speeds of 254mm/sec (10ips), even on rotated barcodes
- Resistant to many everyday chemicals and when used with Z-Xtreme™ 4000T series materials, can withstand harsh chemical exposure

Suggested Applications

- Box, pallet and shipping labels
- Outdoor product tag and labelling for wire, cable and fabricated parts
- Indoor and outdoor product and shelf-edge labelling
- Labels subject to moderate abrasion or friction
- Pharmacy and pharmaceutical labelling
- Applications exposed to solvents, steam, alkali or acid solutions

UL Recognised and CSA Certified

Approved for use with the following materials:

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



Technical Specifications

	Description
Colour	Black
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	9 microns
Scanning Capabilities	IR and Visible Light

Ribbon Compliance

Compliance	3200
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	✓

Stocked Sizes Available for the following Zebra Printers:

ZT220, desktop, 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 30% to 85% RH



3200 Barcode Scannability

The below scannability testing was performed on Z4M, 140XiIII, 90XiIII, 170XiIII, 105SL and Stripe 600.

Label Facestock	Print Speed	Barcode	Lab Results
Coated paper labels and tags	Up to 254mm/sec	10 or 12 mil normal code	Typical ANSI Grade A
Synthetics	Up to 203.3mm/sec	10 or 12 mil normal code	Typical ANSI Grade A
Uncoated paper labels and tags	Up to 152.4mm/sec	10 or 12 mil normal code	Typical ANSI Grade B
Coated paper labels and tags	Up to 254mm/sec	15 mil rotated code	Typical ANSI Grade B
Synthetics	Up to 203.2mm/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 3200 Performance
Glass Cleaner w/Ammonia	✓
Formula 409	✓
Motor Oil	
Brake Fluid	
Gunk Degreaser	
WD-40	
Genesolv	
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 03200BK11005. For testing on other printer models, please contact your Supplies Specialist representative.

2300 European Wax



Available
from stock
on ZipShip

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

- Economy general purpose wax ribbon
- Suitable for printing on uncoated and coated paper labels and tags
- Excellent print quality when printing normal or rotated barcodes
- Ability to print up to speeds of 304mm/sec (12ips) and 152mm/sec (6ips) for rotated barcodes
- Excels when used with Zebra desktop printers

Suggested Applications

- General purpose labelling
- Shipping and receiving
- Inventory tracking
- Warehousing and distribution
- Retail labels and tags

Technical Specifications

	Description
Colour	Black
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	8 microns
Scanning Capabilities	IR and Visible Light

Ribbon Compliance

Compliance	2300
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	✓

Stocked Sizes Available for the following Zebra Printers:

Desktop, 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 20% to 80% RH



2300 Barcode Scannability

The below scannability testing was performed on 140XIII.

Label Facestock	Print Speed	Barcode	Lab Results
Uncoated paper labels and tags	Up to 304.8mm/sec	10 mil normal code	Typical ANSI Grade B
Semi-coated paper labels	Up to 304.8mm/sec	10 mil normal code	Typical ANSI Grade A
Coated paper labels and tags	Up to 304.8mm/sec	10 mil normal code	Typical ANSI Grade A
Uncoated paper labels and tags	Up to 152.4mm/sec	15 mil rotated code	Typical ANSI Grade A
Semi-coated paper labels	Up to 152.4mm/sec	15 mil rotated code	Typical ANSI Grade A
Coated paper labels and tags	Up to 152.4mm/sec	15 mil rotated code	Typical ANSI Grade A
Uncoated paper labels and tags	Up to 152.4mm/sec	10 mil rotated code	Typical ANSI Grade B
Semi-coated paper labels	Up to 152.4mm/sec	10 mil rotated code	Typical ANSI Grade B
Coated paper labels and tags	Up to 152.4mm/sec	10 mil rotated code	Typical ANSI Grade B

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 02300BK11005. For testing on other printer models, please contact your Supplies Specialist representative.

2100 High-Performance Wax

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

- Low printhead energy requirements for image transfer means it can print at extremely fast speeds of up to 304.8mm/sec (12ips) and 203mm/sec (8ips)
- Suitable for printing on uncoated and coated paper labels and tags, and additionally on many matte synthetics
- Offers good smear and scratch resistance when compared to other wax ribbons
- Excellent print quality when printing normal or rotated barcodes

Suggested Applications

- General purpose labelling
- Shipping and receiving including high temperature countries
- Inventory tracking
- Warehousing and distribution
- Retail labels and tags
- High speed print and apply applications with Zebra topcoated paper labels

Technical Specifications

	Description
Colour	Black
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	8 microns
Scanning Capabilities	IR and Visible Light

Ribbon Compliance

Compliance	2100
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	✓

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 20% to 80% RH



2100 Barcode Scannability

The below scannability testing was performed on Z4M, 140XiIII, 90XiIII, 105SL and Stripe 600 printers.

Label Facestock	Print Speed	Barcode	Lab Results
Coated paper labels and tags	Up to 304.8mm/sec	10 or 12 mil normal code	Typical ANSI Grade A
Matte Synthetics	Up to 254mm/sec	10 or 12 mil normal code	Typical ANSI Grade A
Uncoated paper labels and tags	Up to 152.4mm/sec	10 or 12 mil normal code	Typical ANSI Grade B
Coated paper labels and tags	Up to 203.2mm/sec	15 mil rotated code	Typical ANSI Grade B
Matte Synthetics	Up to 152.4mm/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 2100 Performance
Glass Cleaner w/Ammonia	✓
Formula 409	✓
Motor Oil	
Brake Fluid	
Gunk Degreaser	
WD-40	
Genesolv	
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

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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 02100BK11005. For testing on other printer models, please contact your Supplies Specialist representative.



Available from stock on ZipShip

4800 Performance 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

- High quality resin ribbon for use on matte and gloss synthetics, and on selected Zebra topcoated paper labels and tags
- Produces excellent dense barcodes and high-resolution graphics
- Excellent chemical resistance and performance in most harsh environments
- Excellent smear and scratch resistance on both matte and gloss synthetics

Suggested Applications

- Labels exposed to heat, steam, solvents, abrasion and friction
- Outdoor labelling applications in harsh environments
- Steel mill tags
- Automotive labels
- Industrial rating plates

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

Technical Specifications

	Description
Colour	Black
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	9 microns \pm 10%
Scanning Capabilities	IR and Visible Light

Ribbon Compliance

Compliance	4800
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	✓

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 20% to 80% RH



4800 Barcode Scannability

The below scannability testing was performed on 140XiII, 170XiIII, 105SI and Z4Mplus.

Label Facestock	Print Speed	Barcode	Lab Results
Coated paper labels and tags	Up to 152.4mm/sec	10 or 12 mil normal code	Typical ANSI Grade A
Synthetics	Up to 152.4mm/sec	10 or 12 mil normal code	Typical ANSI Grade A
Coated paper labels and tags	Up to 101.6mm/sec	15 mil rotated code	Typical ANSI Grade C
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 4800 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

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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 04800BK11005. For testing on other printer models, please contact your Supplies Specialist representative.

5095 Resin Ribbon

High-performance resin ribbon for use on matte and gloss synthetics

The quality of your thermal ribbons impacts everything from label performance and printhead lifespan to the productivity of your operations. You can count on consistent, premium performance with Zebra's 5095 Resin Ribbon. This high-performance ribbon provides excellent chemical and temperature resistance and delivers excellent print quality, even with small fonts, graphics and rotated barcodes. It is UL/cUL approved for use with select Zebra label materials.



Excellent chemical and temperature resistance

Our high-performance resin ribbon formulation produces images that are resistant to most harsh environments when printed on Zebra's synthetic label and tag materials — including smearing, moisture, abrasion, extreme temperatures and chemicals.

Consistently exceptional performance with Zebra Certified Supplies

Zebra ribbons are rigorously tested to perform. Our supplies R&D team performs stringent print quality, durability and printhead life tests after printing on a wide range of material types, at various speeds within Zebra printers. The result is maximum printer uptime and scannable labels. As an ISO 9001 certified company, we adhere to consistent processes and never substitute alternatives. So, you can count on the same great formulation and performance every time you order.

Zebra ZipShip — on the shelf and ready to ship

Need your ribbon in a hurry? 5095 resin ribbon is part of our Zebra ZipShip program — on the shelf and ready for immediate dispatch. You get fast shipment and the minimum order is just one box.



Count on consistent, premium print quality with Zebra's 5095 high-performance resin ribbon.
For more information, please visit www.zebra.com/supplies

5095 Resin Ribbon Specifications

Technical Specifications	
Color	Black
Ink Formulation	Resin
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	6.5 microns +/- 10%
Scanning Capabilities	IR and visible light
Product Performance and Suitability	
Recommended storage conditions (before use)	1 year duration when stored at 23°F to 104°F/-5°C to 40°C at 20% to 85% RH
Barcode Scannability ¹	
10 or 12 mil normal code up to 203.2mm/sec print speed	Typical ANSI Grade A
15 mil rotated code up to 152.4mm/sec print speed	Typical ANSI Grade B
Print Resistance ²	
Glass cleaner with ammonia	Good
Formula 409	Good
Skydrol	Not recommended
Motor Oil	Good
Brake Fluid	Test in your application
Gunk Degreaser	Good
WD-40	Good
Genesolv	Not recommended
Rho-Tro	Not recommended
Hexane	Good
Xylene	Not recommended
Gasoline	Test in your application
Acetone	Not recommended
Alcohol (90% Isopropyl Alcohol)	Good

UL/cUL Certified Materials with this Ribbon

Z-Ultimate® 3000T White
Z-Ultimate® 3000T Silver
Z-Xtreme™ 4000T White
Z-Xtreme™ 4000T White High-Tack
Z-Xtreme™ 4000T Silver High-Tack
Z-Ultimate® 2500T White
Z-Ultimate® 3000T Yellow
Z-Ultimate® 3000T High-Tack
8000T Void Matte

Regulatory and Compliance

5095 ribbon complies with the following:
REACH/ Substances of Very High Concern (SVHC)
RoHS
Dodd-Frank Act (Conflict Minerals)
Toxic Substances Control Act of 1976
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

Stocked Sizes for Zebra Printers

P4T, desktop, 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

Material Testing in End Application

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 05095BK11005. For testing on other printer models, please contact your Supplies Specialist representative.

Footnotes

1. Scannability testing was performed on synthetic facestock labels using Zebra printers.
2. Print durability testing was performed on Z-Xtreme™ 4000T White using 10 cycles (20 rubs) with the Crockmeter.

Ideal for these applications

- Labels exposed to heat, steam, solvents, abrasion and friction
- Outdoor labelling applications in extreme environments
- Chemical container labels
- Labels exposed to water, steam, alkali or acid solutions
- Automotive labels
- Industrial rating plates and frequently scanned labels



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Available from stock on ZipShip

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.