

4800 Performance Resin



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

- 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	Λ
Gunk Degreaser	✓
WD-40	✓
Genesolv	
Rho-Tro	
Hexane	✓
Xylene	
Gasoline	Λ
Acetone	
Alcohol (90% Isopropyl Alcohol)	✓

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

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



4800 Performance Resin

High quality resin ribbon for use on matte and gloss synthetics

The Zebra 4800 Performance Resin Ribbon is engineered to deliver unparalleled print quality and reliability for your most critical identification needs. Designed specifically for thermal transfer printing on matte and gloss synthetic materials this premium ribbon produces exceptionally sharp, high-resolution text and dense barcodes.



Built to withstand the toughest industrial conditions, the 4800 ribbon creates a permanent bond that will not fade, degrade, or fail over time. It provides outstanding physical durability with supreme resistance to smearing, scratching, and heavy abrasion, protecting vital information during handling, shipping, and long-term storage

Furthermore, its advanced resin formulation offers superior defense against a wide array of harsh chemicals, including alcohol, oils, and industrial solvents, ensuring reliable performance in rugged outdoor environments, laboratories, automotive facilities, and manufacturing plants.

This durability makes it the ideal ribbon for a multitude of specialized and intensive applications. Whether you are managing chemical drum and container labeling (HazCom/GHS), tracking high-value assets, or identifying circuit boards and small electronic components, the 4800 Performance Resin Ribbon delivers unmatched longevity and peace of mind.

Not all thermal ribbons are created equal. There are hundreds of different ribbon formulations in the market. That is why Zebra's Supplies R&D Team has tested and selected only those ribbons that deliver the best print quality and durability. To get the Zebra name, each ribbon must pass a series of print quality and durability tests.

When you purchase Zebra thermal ribbons you can rest assured that the:

- Print will be readable and scannable every time.
- Print will withstand the environment in which it will be used in.
- Back coating will not cause premature printhead failure.

4800 Performance Resin

For more information, please visit www.zebra.com/supplies

Specifications

Technical Specifications	
Color	Black
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	9 microns ±10%
Scanning Capabilities	IR and Visible Light
Product Performance and Suitability	
Recommended storage conditions (before use)	1 year duration when stored at 5°C to 35°C at 20% to 80% RH
Ribbon Compliance	
REACH/ Substances of Very High Concern (SVHC)	Yes
RoHS	Yes
Dodd-Frank Act (Conflict Minerals)	Yes
Toxic Substances Control Act of 1976	Yes
Carcinogenic, Mutagenic and Reprotoxic, or Substances Toxic Substances 1976/769/ EC	Yes
California Proposition 65	Yes
FDA 21 CFR Part 175.300 – Indirect Food Contact – Resinous and Polymeric Coatings	Yes
European Food Directive 1935/2004/EC	Yes
Foodstuffs and Consumer Goods Act and LFGB approved	Yes
Halogen free	Yes
Latex free	No
Animal derivatives free	No
BP Free	Yes
4800 Barcode Scannability	
Label Facestock: Coated paper labels and tags	
Print Speed	Up to 152.4mm/sec
Barcode	10 or 12 mil normal code
Lab Results	Typical ANSI Grade A

Label Facestock: Synthetics	
Print Speed	Up to 152.4mm/sec
Barcode	10 or 12 mil normal code
Lab Results	Typical ANSI Grade A
Label Facestock: Coated paper labels and tags	
Print Speed	Up to 101.6mm/sec
Barcode	15 mil rotated code
Lab Results	Typical ANSI Grade C
Label Facestock: Synthetics	
Print Speed	Up to 101.6mm/sec
Barcode	15 mil rotated code
Lab Results	Typical ANSI Grade B
4800 Barcode Scannability	
Test Solvents	Zebra 4800 Performance
Glass Cleaner w/ Ammonia	Scanning received a "B" ANSI grade or above.
Formula 409	Scanning received a "B" ANSI grade or above.
Skydrol	Barcode does not scan
Motor Oil	Scanning received a "B" ANSI grade or above.
Brake Fluid	Scanning received a "C" to "F" ANSI grade.
Gunk Degreaser	Scanning received a "B" ANSI grade or above.
WD-40	Scanning received a "B" ANSI grade or above.
Genesolv	Barcode does not scan
Rho-Tro	Barcode does not scan
Hexane	Scanning received a "B" ANSI grade or above.
Xylene	Barcode does not scan
Gasoline	Scanning received a "C" to "F" ANSI grade.
Acetone	Barcode does not scan
Alcohol (90% Isopropyl Alcohol)	Scanning received a "B" ANSI grade or above.
Product Performance and Suitability	
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*Specifications are subject to change without notice.	

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