



R510 ULTRA DURABLE RESIN Thermal Transfer Ribbon

Product Description

DNP's R510 ribbon has no substitute – it's the toughest resin ribbon on the market. R510 is the only resin ribbon capable of handling extreme environmental labeling with DNP's unmatched scratch and solvent resistance. Designed with DNP's standard anti-static and back coat properties to protect the print head, R510 has unbeatable Edge Definition™ for crisp, extremely durable, and dense harsh environmental bar codes.

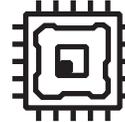
Recommended Applications



AGENCY



EXTREME ENVIRONMENT



CIRCUIT BOARD



CHEMICAL DRUM



AUTOMOTIVE



SIGNAGE



ELECTRONIC COMPONENTS



PRODUCT IDENTIFICATION



ASSET TRACKING

Recommended Substrates

Polyester, polypropylene, PVC cards, PET cards

Performance Characteristics

- Toughest resin ribbon on the market
- Unmatched in abrasion and solvent resistance
- UL/CSA recognized
- High density printing insuring Edge Definition™
- Anti-static for easy handling and extended print head life
- Available in colors and metallics
- DNP's specialty formulated back coating for print head protection

THE DAI NIPPON PRINTING GROUP

DNP is the largest manufacturer of thermal transfer ribbons for facsimile machines, bar code and dye-sublimation printers. DNP is also the world's largest diversified printing/coating technologies company. At its 40 plants, both in Japan and overseas, DNP's operations include commercial printing, packaging, decorative materials, electronics, business forms and information media supplies. DNP is a Global Fortune 500 company with \$13 billion in annual revenue.

PRODUCTS

WAX

- W110 General Purpose Wax
- W137 Premium Plus Wax

WAX/RESIN

- M250 Premium Plus Wax/Resin

RESIN

- R300 General Purpose Resin
- R316 Specialty Resin
- R340 Permanent Care Resin
- R510 Ultra Durable Resin

NEAR EDGE

- W190 Near Edge Wax
- M290 Near Edge Wax/Resin
- R390 Near Edge Resin

COLORS & METALLICS

- W120C General Color Wax
- R316C Specialty Color Resin
- R510C Durable Color Resin

R510 PROPERTIES



Contact DNP

1.800.814.4672

www.dnpribbons.com

RIBBON SPECIFICATIONS

DESCRIPTION	TECHNICAL SPECIFICATIONS
Ink	Resin
Color	Black, Colors, Metallics
Ink Thickness	1.8 ± 0.4μ
Base Film Thickness	4.5μ
Ribbon Thickness	8.3 ± 0.8μ
Ink Melting Point	166°C–168°C (330.8°F–334.4°F)
Print Density	>1.9

PERFORMANCE OF PRINTED IMAGE

DESCRIPTION	TECHNICAL SPECIFICATIONS
Tested Substrate	FLEXcon THERMAfilm® SELECT™ 21830
Abrasion Resistance Test (TEST METHOD: Standardized Abrasion Test Wheel)	100 cycles @ 500g covered CS-10
Solvent Resistance Test (TEST METHOD: Crockmeter)	WATER 1000 cycles @ 248g covered with cloth*
	IPA 1000 cycles @ 248g covered with cloth*
	KEROSENE 400 cycles @ 248g covered with cloth*
	BRAKE FLUID 300 cycles @ 248g covered with cloth*
	GASOLINE 100 cycles @ 248g covered with cloth*
Heat Resistance	<220°C (<428°F)
Print Speed Range	2 to 10 IPS

CONVERSION CHART

mm to in.	(mm ÷ 25.4)	in. to mm	(in. ÷ 0.03937)
m to ft.	(m ÷ 0.3048)	ft. to m	(ft. ÷ 3.2808)
C° to F°	[(1.8 × C°) + 32]	F° to C°	[(F° ÷ 1.8) – 17.777]
in. to m	(MSI ÷ 0.645)	m ² to MSI	(m ² × 0.645)

RIBBON STORAGE CONDITIONS

Temperature	5°C to 35°C (41°F to 95°F)
Humidity	10% to 85% relative humidity
Light	Avoid direct sunlight

*Highest number of cycles where ANSI grade A can still be scanned.
All information on data sheet generated at DNP laboratories worldwide. DNP reserves the right that measured values may vary slightly when tested under different environments. Information subject to revisions without notification.

Quality Systems
ISO Registered



F-5100301

RESIN

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