



## Thermal Transfer Ribbon Technical Data Sheet

### R390 Near Edge Resin

#### Product Description

R390 offers the same quality resin printing as the popular R300 for near edge applications. R390 is extremely versatile on a wide variety of substrates and also prints at extremely high speeds for faster turnaround. It outperforms the competition in abrasion and solvent resistance, and contains DNP's specially formulated backcoat technology for printhead protection as well as DNP's exclusive anti-static properties for easy handling and extra printhead protection. Like all DNP ribbons, R390 is the industry leader in Edge Definition™ for clean, extremely durable, and dense bar codes.

#### Recommended Applications



ASSET TRACKING



AUTOMOTIVE



CHEMICAL DRUM



ELECTRONIC COMPONENT



EXTREME ENVIRONMENT



HAZARDOUS



HEALTHCARE



HORTICULTURE



PHARMACEUTICAL

#### Recommended Substrates

Synthetic paper, polypropylene, polyethylene, polyolefin, polyester, PVC cards, vinyl, Kimdura®, Valeron®, Polyart®

#### Performance Characteristics

- Excellent print quality at high speeds
- Increased durability across a wide range of resin applications
- Extensive label adaptability for expanded application options
- Unbeatable Edge Definition™ for dark, dense images and improved scan rates
- DNP's specially formulated backcoating for printhead protection
- Anti-static for easy handling and extended printhead life

*The information on this data sheet was obtained in DNP IMS America laboratories. Measured values may vary slightly when tested in a different environment. Information contained within this document is subject to change without notification.*



Registered to  
ISO 9001  
REV 3-24-09

Visit us at [www.dnpribbons.com](http://www.dnpribbons.com)

#### THE AMERICAS

DNP IMS America Corporation  
4524 Enterprise Drive NW  
Concord, NC 28027  
UNITED STATES  
TEL: +1.800.814.4672  
FAX: +1.704.784.7196  
EMAIL: [sales@dnpribbons.com](mailto:sales@dnpribbons.com)

DNP IMS America Corporation  
1001 Technology Drive  
Mt. Pleasant, PA 15666  
UNITED STATES  
TEL: +1.888.569.7222  
FAX: +1.724.696.7555  
EMAIL: [sales\\_marketing@dnpribbons.com](mailto:sales_marketing@dnpribbons.com)

#### EUROPE

DNP IMS Netherlands B.V.  
Schipholweg 275  
1171 PK Badhoevedorp  
THE NETHERLANDS  
TEL: +31.(0)2044.99510  
FAX: +31.(0)2065.97979  
EMAIL: [sales@dnpribbons.eu](mailto:sales@dnpribbons.eu)

#### ASIA

Dai Nippon Printing Co., Ltd.  
1-1-1 Ichigaya Kagamachi  
Shinjuku-ku, Tokyo 162-8001  
JAPAN  
TEL: +81.3.5225.8644  
FAX: +81.3.3265.4224  
EMAIL: [sales.asia@dnpribbons.com](mailto:sales.asia@dnpribbons.com)

DNP Singapore Pte. Ltd.  
4 Pandan Crescent  
SINGAPORE 128475  
TEL: +65.6469.7611  
FAX: +65.6466.8486  
MOBILE: +65.9722.8995  
EMAIL: [ims@dnp.com.sg](mailto:ims@dnp.com.sg)



## Thermal Transfer Ribbon Technical Data Sheet

### R390 Near Edge Resin

#### Ribbon Properties

Description	Result	Test Method
Ink	Resin	
Color	Black	Visual
Total Thickness	6.0 ± 0.5μ	Micrometer
Base Film Thickness	4.8 ± 0.3μ	Micrometer
Ink Thickness	1.2 ± 0.2μ	Micrometer
Ink Melting Point	86°C (187°F)	Differential Scanning Calorimeter

#### Durability of Printed Image

Label Stock: Top-coated Polyester

Print Speed: 6 IPS

Description	Result	Test Method
Print Density	> 1.80	Densitometer
Smudge Resistance	A*	Colorfastness Tester - 100 Cycles @ 500 Grams with Cotton Cloth
Scratch Resistance	A*	Colorfastness Tester - 50 Cycles @ 200 Grams with Stainless Steel Pointed Tip

\*American National Standard Institute (ANSI) Grade Levels A, B, C, D, and F, where A is excellent, B is above average, C is average, D is below average, and F is poor.

#### Conversion Chart

Millimeters (mm) to Inches = mm ÷ 25.4	Inches to Millimeters (mm) = Inches ÷ 0.03937
Meters (m) to Feet (ft) = m ÷ 0.3048	Feet (ft) to Meters (m) = Feet ÷ 3.2808
C° to F° = (1.8 X C°) + 32 = F°	F° to C° = (F° ÷ 1.8) - 17.77
Thousand square inches (MSI) to m <sup>2</sup> = MSI X 0.645	MSI = m <sup>2</sup> ÷ 0.645

The information on this data sheet was obtained in DNP IMS America laboratories. Measured values may vary slightly when tested in a different environment. Information contained within this document is subject to change without notification.



Registered to  
ISO 9001  
REV 3-24-09

Visit us at [www.dnpribbons.com](http://www.dnpribbons.com)

#### THE AMERICAS

DNP IMS America Corporation  
4524 Enterprise Drive NW  
Concord, NC 28027  
UNITED STATES  
TEL: +1.800.814.4672  
FAX: +1.704.784.7196  
EMAIL: [sales@dnpribbons.com](mailto:sales@dnpribbons.com)

DNP IMS America Corporation  
1001 Technology Drive  
Mt. Pleasant, PA 15666  
UNITED STATES  
TEL: +1.888.569.7222  
FAX: +1.724.696.7555  
EMAIL: [sales\\_marketing@dnpribbons.com](mailto:sales_marketing@dnpribbons.com)

#### EUROPE

DNP IMS Netherlands B.V.  
Schipholweg 275  
1171 PK Badhoevedorp  
THE NETHERLANDS  
TEL: +31.(0)2044.99510  
FAX: +31.(0)2065.97979  
EMAIL: [sales@dnpribbons.eu](mailto:sales@dnpribbons.eu)

#### ASIA

Dai Nippon Printing Co., Ltd.  
1-1-1 Ichigaya Kagamachi  
Shinjuku-ku, Tokyo 162-8001  
JAPAN  
TEL: +81.3.5225.8644  
FAX: +81.3.3265.4224  
EMAIL: [sales.asia@dnpribbons.com](mailto:sales.asia@dnpribbons.com)

DNP Singapore Pte. Ltd.  
4 Pandan Crescent  
SINGAPORE 128475  
TEL: +65.6469.7611  
FAX: +65.6466.8486  
MOBILE: +65.9722.8995  
EMAIL: [ims@dnp.com.sg](mailto:ims@dnp.com.sg)