



## Thermal Transfer Ribbon Technical Data Sheet

### TR4085plus™ Premium Resin-Enhanced Wax

#### Product Description

The industry's leading wax product since its introduction to the market in November 2000, TR4085plus™ features our SmoothCoat® backcoat with a 4 Million Linear Inch Guarantee. This unique ink formulation dissipates static and is versatile enough to print on a wide variety of label stocks. No other wax product beats TR4085plus™ when it comes to Edge Definition™ for crisp, rotated bar codes and dark, durable images.

#### Recommended Applications



FLEXIBLE PACKAGING



GENERAL



INVENTORY



LOGISTICS



PARTS PACKAGING



PHARMACEUTICAL



PRODUCT ID



RETAIL



RFID



SHELF



SHIPPING



SIGNAGE

#### Recommended Substrates

Coated/uncoated paper & tag stocks, synthetic paper, polyethylene, polypropylene, polyolefin, Kimdura®, Valeron®, Polyart®, gloss paper, flood-coated paper, UV varnished labels

#### Performance Characteristics

- Prints on a wide variety of substrates from uncoated papers to mid-range synthetic films
- Prints at high speeds (12 IPS) delivering crisp, rotated bar codes
- Dissipates static
- Enhanced smudge and scratch resistance
- Superior print quality on flood-coated labels
- Unbeatable Edge Definition™ for dark, dense images and improved scan rates

*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 4-15-09

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#### 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)

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)

#### ASIA

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)



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### TR4085plus™ Premium Resin-Enhanced Wax

#### Ribbon Properties

Description	Result	Test Method
Ink	Wax (resin-enhanced)	
Color	Black	Visual
Total Thickness	8.0 ± 0.5μ	Micrometer
Base Film Thickness	4.8 ± 0.3μ	Micrometer
Ink Thickness	3.2 ± 0.2μ	Micrometer
Ink Melting Point	75°C (167°F)	Differential Scanning Calorimeter

#### Durability of Printed Image

Label Stock: Coated Paper

Print Speed: 6 IPS

Description	Result	Test Method
Print Density	> 1.80	Densitometer
Smudge Resistance	A*	Colorfastness Tester - 50 Cycles @ 500 Grams with Cotton Cloth
Scratch Resistance	A*	Colorfastness Tester - 20 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	m <sup>2</sup> = MSI ÷ 0.645

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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

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

#### EUROPE

DNP IMS Netherlands B.V.  
Schipholweg 275  
1171 PK Badhoevedorp  
THE NETHERLANDS  
TEL: +31.(0)2044.99510  
FAX: +31.(0)2065.97979  
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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

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4 Pandan Crescent  
SINGAPORE 128475  
TEL: +65.6469.7611  
FAX: +65.6466.8486  
MOBILE: +65.9722.8995  
EMAIL: ims@dnps.com.sg