



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

- Halogen-Free
- 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



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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 ² = MSI X 0.645	MSI = m ² ÷ 0.645

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

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