

# Thermal Transfer Ribbons

## TECHNICAL DATA SHEET



LABELS DIRECT

## R510<sup>HF</sup> Ultra Durable Resin

### PRODUCT DESCRIPTION

Our halogen-free R510<sup>HF</sup> is one of the toughest resin ribbons on the market. R510<sup>HF</sup> is the only halogen-free resin ribbon capable of handling extreme environmental labeling with our unmatched scratch and solvent resistance. Designed with our standard anti-static and backcoat properties to protect the printhead, R510<sup>HF</sup> has unbeatable edge definition for crisp, extremely durable, and dense harsh environmental bar codes.

### RECOMMENDED SUBSTRATES

Top-coated vinyl, polyimide, polyesters, PVC cards, PET cards

### PERFORMANCE CHARACTERISTICS

- Halogen-free
- UL recognized
- Unmatched in abrasion and solvent resistance
- High density printing ensuring edge definition
- Anti-static for easy handling and extended printhead life
- Specially formulated backcoating for printhead protection

### RECOMMENDED APPLICATIONS



AGENCY



ASSET  
TRACKING



AUTOMOTIVE



CHEMICAL  
DRUM



CIRCUIT  
BOARD



ELECTRICAL  
COMPONENT



EXTREME  
ENVIRONMENT



HAZARDOUS



HEALTHCARE



OUTDOOR



PRODUCT ID



SECURITY

# R510<sup>HF</sup> Ultra Durable Resin

## RIBBON PROPERTIES

DESCRIPTION	RESULT	TEST METHOD
Ink	Resin	
Color	Black	Visual
Total Thickness	7.5 ± 0.5μ	Micrometer
Base Film Thickness	4.8 ± 0.3μ	Micrometer
Ink Thickness	2.7 ± 0.2μ	Micrometer
Ink Melting Point	109°C (228°F)	Differential Scanning Calorimeter

## DURABILITY OF PRINTED IMAGE

**Label Stock:** Top-coated Polyester

**Print Speed:** 6 IPS

DESCRIPTION	RESULT	TEST METHOD
Print Density	> 1.90	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

Meters (m) to Feet (ft) = m ÷ 0.3048

C° to F° = (1.8 X C°) + 32 = F°

Thousand square inches (MSI) to m<sup>2</sup> = MSI X 0.645

Inches to Millimeters (mm) = Inches ÷ 0.03937

Feet (ft) to Meters (m) = Feet ÷ 3.2808

F° to C° = (F° ÷ 1.8) - 17.77

MSI = m<sup>2</sup> ÷ 0.645

### Labels Direct, Inc.

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*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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