R316 Specialty Heat Resistant Resin

Product Description

R316 is the industry's best resin ribbon for printing on coated and synthetic paper substrates.
It is also able to withstand environmental temperatures of up to 220° C (428° F) making it perfect for applications like heat tunnel passage. R316 uses remarkably low print energy settings while producing high quality heat resistant bar codes. This ribbon's design incorporates DNP's standard anti-static and backcoat properties that protect the printhead, and also prints with DNP's unmatched edge definition producing clean, extremely durable, dense bar codes every time.

Recommended Applications

Electronics	Health & Beauty	Inventory & Logistics	Outdoor	Pharmaceutical

Recommended Substrates

Paper	Coated paper
	Synthetic papers
Economy Synthetics	Polypropylene
	Polyethylene
	Polyolefin
Specialty Materials	Valeron®
	Kimdura®
	Polyart®
	Kromekote
	Matte Kapton®

Performance Characteristics

Recommended for use in extreme heat conditions
Compatible with coated and synthetic paper
Remarkably low print energy used to create high quality harsh environment bar codes
Anti-static for easy handling and extended printhead life
Industry leading in edge definition for clean, durable, and dense bar codes
DNP's specially formulated backcoating for printhead protection

DNP Technical Data Sheet

R316 Specialty Heat Resistant Resin

Ribbon Properties

Description	Result	Test Method
Ink	Resin	
Color	Black	Visual
Total Thickness	7.8 ± 0.5µ	Micrometer
Base Film Thickness	4.8 ± 0.3µ	Micrometer
Ink Thickness	3.0 ± 0.2µ	Micrometer
Ink Melting Point	127°C (260°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^2 = MSI X 0.645	MSI = m^2 ÷ 0.645

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