

NORWOOD MARKING SYSTEMS

An ITW Company
250 Industry Avenue
Frankfort, IL 60423

HOT STAMP RIBBON

Serving the packaging industry for over 40 years.

Features & Benefits

- ◆ Clean, dry, consistent imprints
- ◆ Original manufacturer quality specifications
- ◆ Competitive pricing
- ◆ Pre-scheduled automatic deliveries
- ◆ Six stocked colors to choose from
- ◆ Prompt same day/next day delivery on standard colors and sizes
- ◆ Custom colors and sizes available to enhance your graphic design



Norwood's hot stamp ribbon is the industry standard because of its superior performance and flexibility on a wide variety of substrates. We manufacture and stock six standard colors and can formulate any color to enhance package graphics. Norwood's strict quality control standards and years of experience in ribbon production ensure a consistently high-performance product. Our ribbon prints clear and instantly dry messages with a Norwood or other hot stamp printer.

Formulations available for UV, Water Soluble, and Food Grade applications.

Phone: 800-225-8283

Fax: 815-469-4060

E-mail: ribbon@itwnorwood.com

Web address: www.itwnorwood.com



HOT STAMP RIBBON SPECIFICATIONS

Ink	Type: Matt pigment Color: 172 Black, 273 White, 373 Blue, 473 Yellow, 772 Green, and 872 Red Black #987 for pharmaceutical applications FDA compliant ribbons available Custom colors available																		
Carrier	Material: Polyester film Thickness: 12 Micron																		
Printing Properties	<p><u>Substrates</u> Films: OPP, PE, PET, Metalized, Nylon, Cellulose, and Cellophane Papers: Coated/Uncoated, Synthetics <i>Note: All formulas react differently to various substrates</i></p> <p>Typical Transfer Properties by Substrate:</p> <table border="1"> <thead> <tr> <th><u>Material</u></th> <th><u>Temperature °F</u></th> <th><u>Temperature °C</u></th> </tr> </thead> <tbody> <tr> <td>Polyethylene</td> <td>220 - 250</td> <td>105 - 121</td> </tr> <tr> <td>Polypropylene</td> <td>240 - 275</td> <td>115 - 135</td> </tr> <tr> <td>Polyester</td> <td>250 - 275</td> <td>121 - 135</td> </tr> <tr> <td>Nylon</td> <td>250 - 275</td> <td>121 - 135</td> </tr> <tr> <td>Paper</td> <td>250 - 300</td> <td>121 - 149</td> </tr> </tbody> </table> <p>Average Temperature at Type Face by Formula Number: 987 use (275° - 300°) 170 use (150° - 200°) 173 use (130° - 160°) 370 use approx. 200° 373 use approx. 250° all others use (220° - 275°F) 930 (blue) is a good substitute for 370 (blue) - no heat required.</p>	<u>Material</u>	<u>Temperature °F</u>	<u>Temperature °C</u>	Polyethylene	220 - 250	105 - 121	Polypropylene	240 - 275	115 - 135	Polyester	250 - 275	121 - 135	Nylon	250 - 275	121 - 135	Paper	250 - 300	121 - 149
<u>Material</u>	<u>Temperature °F</u>	<u>Temperature °C</u>																	
Polyethylene	220 - 250	105 - 121																	
Polypropylene	240 - 275	115 - 135																	
Polyester	250 - 275	121 - 135																	
Nylon	250 - 275	121 - 135																	
Paper	250 - 300	121 - 149																	
Print Durability	Resistance to: Abrasion: Excellent Edible Oil: Excellent Boiling: Excellent Water: Excellent Freezing: Excellent																		
Storage	Store in cool dry place (65-75°F) (18-25°C) with humidity at 50 - 60%																		
Disposal Instructions:	In bulk with approval of local authority, otherwise normal domestic routes.																		
Shelf Life:	Six-month guarantee under recommended storage conditions.																		
Toxicity:	Compliant with CONEG 1994 Final Limits.																		

The information contained in this data sheet is believed to be reliable, but the individual user must judge the suitability of the product described. These applications may be subject to change without notification or obligation. No warranty or liability for results obtained is expressed or implied.

NORWOOD MARKING SYSTEMS
An ITW Company

2538 Wisconsin Avenue
Downers Grove, IL 60515

Phone: 800-225-8283
Fax: 815-469-4060
Email: ribbon@itwnorwood.com
Web Address: www.itwnorwood.com

