TR5050 is the first universal product to combine the flexibility of a general-purpose ribbon with the durability of a wax/resin ribbon. TR5050’s unsurpassed technology provides the darkest, most durable image possible from a general-purpose ribbon. It allows you to gain additional wax/resin ribbon business with an economical product.

Specific Features

- Prints at high speeds (12 ips+)
- Prints at high resolution (400 dpi+)
- Excellent rotated bar codes
- Features Sony’s SmoothCoat™ backcoat
- UL recognized

Recommended Applications

Blood bags, pharmaceutical labels, retail tags, shipping labels, direct package printing (poly-bags), tote labels.

Shipping Labels
Sony ribbons deliver crisp rotated bar codes on coated and uncoated tag and label stocks.

Direct Package Printing
Scratch and smudge resistance make Sony ribbons ideal for direct printing on flexible poly-bags.

Storage Labels
Sony ribbons are a durable, cost-effective solution for your barcoding applications.

Retail Package Printing
Sony’s high-quality images make point-of-purchase thermal transfer printing possible.
# TR5050

**Premium Wax/Resin**

## Ribbon Property

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
<th>Measurement Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ink Material</td>
<td>Wax/Resin</td>
<td>—</td>
</tr>
<tr>
<td>Total Thickness (µm)</td>
<td>8.1 ± 0.5</td>
<td>Micrometer</td>
</tr>
<tr>
<td>Base Film Thickness (µm)</td>
<td>4.8 ± 0.4</td>
<td>Micrometer</td>
</tr>
<tr>
<td>Ink Thickness (µm)</td>
<td>3.1 ± 0.3</td>
<td>Micrometer</td>
</tr>
<tr>
<td>Ribbon Transmission Density</td>
<td>≥ 1.6</td>
<td>Densitometer</td>
</tr>
<tr>
<td>Print Density</td>
<td>≥ 1.8</td>
<td>Densitometer</td>
</tr>
</tbody>
</table>

## Durability of Printed Image

- **Label Stock:** Coated paper
- **Print Speed:** 6 IPS
- **Print Density:** 1.8
- **Smudge Resistance:** ANSI A
- **Scratch Resistance:** ANSI A
- **Test Equipment:** Colorfastness Tester
- **Conditions:**
  - Smudge Test: 50 cycles @ 500 grams with cotton cloth
  - Scratch Test: 20 cycles @ 200 grams with stainless steel pointed tip

1Represents the American National Standard Institute (ANSI) Grade measured at the given conditions. Grade levels are 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

<table>
<thead>
<tr>
<th>Unit Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millimeters (mm) to inches  ( \frac{\text{mm}}{25.4} )</td>
</tr>
<tr>
<td>Meters (m) to Feet (ft)  ( \frac{m}{0.3048} )</td>
</tr>
<tr>
<td>C° to F° ( \frac{(1.8 \times C°) + 32}{F°} )</td>
</tr>
<tr>
<td>Thousand square inches (MSI) to m²  ( \text{msi} \times 0.645 )</td>
</tr>
</tbody>
</table>

## Recommended Applications

- Blood bags, pharmaceutical labels, retail tags, shipping labels, direct package printing (poly-bags), tote labels, horticulture labels.

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