• Excellent Printing Quality
• Great Smudge and Heat Resistance
• High-Speed Printing

**Trusted Dependability, Quality Assured, Exceptional Value**

T113L is a new generation resin enhanced wax ribbon, particularly adapted to standard label printing where good mechanical resistance is required.

The ink provides excellent print quality of standard and ladder barcodes, very small text, large characters and logos at a blackness of up to 2.0 (ODR). The ribbon structure allows printing on various receptors, such as coated and uncoated papers and some synthetics.

The printed image offers improved smudge resistance compared to standard wax and a heat resistance up to 212°F (100°C). These characteristics remain at speeds up to 12 ips (300 mm/s) with 200, 300 and 600 dpi print heads.

T113L features outstanding backcoat technology, ensuring excellent print head protection, preventing clogging and static buildup, which prolongs print head life and makes this ribbon suitable for printing on RFID tags.
### T113L RIBBON SPECIFICATIONS

<table>
<thead>
<tr>
<th>Backcoating</th>
<th>PET Film Thickness</th>
<th>Silicon based / Friction coefficient: $K_d &lt; 0.2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tearing Resistance</td>
<td>&gt; 300 N/mm² (MD)</td>
<td></td>
</tr>
<tr>
<td>Ink</td>
<td>Type: Wax</td>
<td></td>
</tr>
<tr>
<td>Melting Point</td>
<td>149°F (65°C)</td>
<td></td>
</tr>
<tr>
<td>Blackness</td>
<td>Up to 2.0 (ODR)</td>
<td></td>
</tr>
<tr>
<td>Ribbon Thickness</td>
<td>&lt; 8.5 µm</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>12 months, 41-95°F (5-35°C), 20-80% Humidity Rate</td>
<td>Anti-static buildup treated</td>
</tr>
<tr>
<td>Heat Resistance</td>
<td>Up to 212°F (100°C)</td>
<td></td>
</tr>
</tbody>
</table>

#### CERTIFICATIONS AND APPROVALS (for other standards, please contact us)

- **Heavy Metals**
  - EC 98/638

- **RoHS/WEEE**
  - EC directives 2002/95 and 2002/96, compliance to the limitation of dangerous substances in electric and electronic equipments.

- **Ames Test**
  - The ribbon is not mutagenic, does not cause DNA modifications.

- **TSCA/CP 65**
  - The ribbon does not contain any of the substances on this list.

- **EC Directives**
  - 1999/45/EC and 2001/59/EC: The ribbon does not contain any substance classified as dangerous for health.

#### APPLICATION FIELDS

- Inventory, Shipping, Pharmaceutical, Cosmetics, Flexible Packaging, Flexible Packaging for Frozen Applications, Flexible Packaging for Hot Processes, Rating Plates, CDs, Retail Labeling, Care Labels, Signage & Logos, Laboratory, Healthcare, Tags, Food Contact, Livestock, Outdoor Applications, Conveyor Sorting, Chemical Drums, Automotive

  If your application is not among these, please contact us.

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**GENERIC SPECIFICATIONS**

- **Printing Quality**
  - Blackness: Max 2.0 (ODR)
  - 0° Barcode: 85
  - 90° Barcode: 75
  - Sharpness: 85

- **Resistance**
  - Mechanical Resistance
    - Wax: 55
  - Coated Side Out
  - Coated Side In

- **Sensitivity**
  - Receptor Compatibility
    - Uncoted papers: 😧
    - Coated papers: 😃
    - High gloss papers: 😃
    - Synthetics: 😃

- **Printing Speed**
  - 12 ips

- **Energy**
  - Low, Medium, High

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**Backcoating**

- **PET Film**
  - Thickness: 4.5 µm
  - Tearing Resistance: > 300 N/mm² (MD)

- **Ink**
  - Type: Wax
  - Melting Point: 149°F (65°C)
  - Blackness: Up to 2.0 (ODR)

- **Ribbon**
  - Thickness: < 8.5 µm
  - Storage: 12 months, 41-95°F (5-35°C), 20-80% Humidity Rate
  - Specs: Anti-static buildup treated

- **Heat Resistance**
  - Up to 212°F (100°C)