



**Technical Data Sheet**  
**Version 6**  
**Date : 08-12-2003**

## **M1300 Flexible Nylon**

M1300 is a white nylon coated fabric tape for thermal transfer printing. It is formulated with a permanent acrylic adhesive and is mainly used for identifying electrical cables and wires (flagging and wrapping) as well as to adhere to curved surfaces. It is not recommended for outdoor usage. This tape is halogen free.

<b>Property</b>	<b>Unit</b>	<b>Value</b>	<b>Test method</b>	
<b>1. General</b>				
- Total thickness	Micron	230 ± 10	Micrometer	
- Thickness face material	Micron	130 ± 10		
- Thickness liner	Micron	80 ± 5		
<b>2. Adhesive properties</b>				
		<b>Dwell</b>		
		<b>20 min</b>	<b>24 hrs</b>	
- to stainless steel	N/25mm	11	13	PSTC-1
- to glass		11	12	
- to PVC		12	14	
- to textured ABS		9	12	
- to powder coated steel		9	15	
- to wood		7	8	
- to polypropylene film		7	8	
- to polyethylene		7	8	
- to Lever Arch File		6	8	
- to steel computer casing		7	9	
<b>3. Flagging properties</b>				
- flagging around electrical cables (Ø 3.6 mm)		Perfect flagging		
- flagging around electrical cables (Ø 8 mm)		Perfect flagging		
- flagging around steel bar (Ø 14 mm)		Perfect flagging		

<p><b>4. Wrapping properties</b></p> <ul style="list-style-type: none"> <li>- Wrapping around electrical cables ( Ø 3.6 mm)</li> <li>- Wrapping around electrical cables ( Ø 8 mm)</li> <li>- Wrapping around steel bar (Ø 14 mm)</li> </ul>		<p>Perfect wrapping</p> <p>Perfect wrapping</p> <p>Perfect wrapping</p>	
<p><b>5. Chemical resistance of text printed in ILP219</b></p> <ul style="list-style-type: none"> <li>- Eurosuper</li> <li>- Diesel</li> <li>- Isopropylalcohol</li> <li>- Ethanol</li> <li>- Ethyl acetate</li> <li>- Skydrol* LD-4 (hydraulic engine oil)</li> <li>- Sabesto** automotive brake fluid cleaner</li> <li>- Water</li> </ul> <p><b>Abrasion resistance of text Printed in ILP219</b></p> <ul style="list-style-type: none"> <li>- Pencil erasure</li> <li>- Polystyrene pin</li> <li>- Sandpaper</li> </ul>	<p>30x</p> <p>30x</p> <p>30x</p> <p>15x</p> <p>5x</p> <p>15x</p> <p>15x</p> <p>30x</p> <p>30x</p> <p>30x</p> <p>30x</p>	<p>Slight print removal</p> <p>Slight print removal</p> <p>Printing gone</p> <p>Printing gone</p> <p>Printing gone</p> <p>Printing gone</p> <p>Printing gone</p> <p>Slight print removal</p> <p>No visible effect</p> <p>No visible effect</p> <p>Slight print removal</p>	<p>Crockmeter, 900g weight/arm</p>
<p><b>6. UV light stability of label</b></p> <ul style="list-style-type: none"> <li>- 30 days with UV light in suntester</li> </ul>		<p>No visible effect on text and background</p>	
<p><b>7. Temperature stability</b></p> <ul style="list-style-type: none"> <li>- Application temperature</li> <li>- Long term high service temperature <ul style="list-style-type: none"> <li>- 30 days at 90°C</li> <li>- 30 days at 120°C</li> </ul> </li> <li>- Long term low service temperature <ul style="list-style-type: none"> <li>- 30 days at -18°C</li> </ul> </li> </ul>	<p>°C</p>	<p>Room temperature</p> <p>A slight yellowing of the background</p> <p>A slight yellowing of the background</p> <p>No visible effect</p>	

<p>- Short term high service temperature</p> <p>5' exposure</p>		<p>No visible effect to tape up to 180°C ; slight shrinkage of tape at 210°C, slight discoloration, print still legible but loss of adhesive properties ; label not functional anymore</p>	
<p><b>8. Humidity resistance of applied label</b></p> <p>- 30 days at 40°C, 95 % R.H</p>		<p>No visible effect</p>	
<p><b>9. Weatherability in QUV with rain/sun cycles</b></p> <p>- 30 days at 60°C</p>		<p>No visible effect on text. Slight yellowing of background</p>	
<p><b>10. Shelf life of cassette</b></p> <p>- 1 year at 5-25°C and 40-80% relative humidity in its original packaging. We are confident that our product will perform well beyond this time frame. However, it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use, in their actual applications.</p>		<p>Avoid sudden changes in temperature or humidity changes. This may cause condensation problems. Do not store in direct sunlight, avoid Nox and SOx gases as yellowing might occur.</p>	

**\*Skydrol is a registered trademark from Solutia**

**\*\* Sabesto is a registered trademark from Wurth**

Scratch & Solvent resistance : The printed labels are subjected to different scratching sources and chemicals for a fixed number of cycles with a finger weight of 900g.