

## Technical Data Sheet Edition 7

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## M1300 Flexible Nylon

M1300 is a 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. The tape exists in white and yellow. It is not recommended for outdoor usage. This tape is halogen free.

Property		Unit	Value		Test method
	General				
-	Total thickness	Micron	230 ± 10		Micrometer
2.	Adhesive properties				
	to stainless steel to glass to PVC to textured ABS to powder coated steel to steel computer casing to polyethylene	N/25mm	24 hrs 12 18 15 8 16 14 14	<b>72 hrs</b> 15 20 20 12 17 17	PSTC-1
3.	Flagging properties				
-	flagging around electrical cables ( $\varnothing$ 3.6 mm)		Perfect flagging		
-	flagging around electrical cables ( $\varnothing$ 8 mm)		Perfect flagging		
-	flagging around steel bar (∅ 14 mm)		Perfect flagging		

4.	Wrapping properties			
	mapping proportion			
-	Wrapping around electrical cables (Ø 3.6 mm)		Perfect wrapping	
-	Wrapping around electrical cables (Ø8 mm)		Perfect wrapping	
-	Wrapping around steel bar (∅ 14 mm)		Perfect wrapping	
5.	Chemical resistance of text printed in Rhino 6000			
	Fuel Gasoline Isopropylalcohol Ethanol Water Skydrol* LD-4 Ethylacetate	30x 30x 30x 30x 30x 30x 5x	Severe print removal Moderate print removal Printing gone Printing gone Slight print removal Printing gone Printing gone Printing gone	Crockmeter, 900g weight/arm
	Abrasion resistance of text Printed in Rhino 6000			
  -  -	Pencil erasure Polystyrene pin Sandpaper	30x 30x 30x	No visible effect No visible effect Slight print removal	
6.	UV light stability of label			
-	30 days with UV light in suntester		No visible effect on text and background	
7.	Temperature stability			
- <i>F</i>	application temperature	°C	Room temperature	
- L	ong term high service temperature			
	- 30 days at 90°C		A slight yellowing of the background	
	- 30 days at 120°C		A slight yellowing of the background	
- L	ong term low service temperature - 30 days at –18°C		No visible effect	

	Short term high service mperature  5' exposure	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	
8.	Humidity resistance of applied label  30 days at 40°C, 95 % R.H	No visible effect	
9.	Weatherability in QUV with rain/sun cycles 30 days at 60°C	No visible effect on text. Slight yellowing of background	
-	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.	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.	

<sup>\*</sup>Skydrol is a registered trademark from Solutia