



## Dymo 45013 D1 Label - Technical Data Sheet (TDS)

### (1) Description

D1 is a one-tape system available in 12 different colour combinations and five different widths of 6, 9, 12, 19, and 24mm in 7 meter roll lengths. The material is polyester (PET ) tape used for thermal transfer printing. It is formulated with an acrylic adhesive and is mainly used for general ID, the office, retail, consumer and outdoor applications. The tape adheres to smooth surfaces, however not recommended for curved or rounded surfaces.

Property	Unit	Value	Test method
<b>1. General</b>			
Thickness tape	Micron	137± 10%	Micrometer
Thickness liner	Micron	55 ± 10%	
<b>2. Adhesive properties</b>			
	N/25mm	<b>Dwell 20 min 24 hrs</b>	
to stainless steel		7,5	10
to glass		9	10
to PVC		10	11
to textured ABS		6	7
to powder coated steel		6	6
to wood		2	4
to polypropylene film matt		4	5
to polypropylene film glossy		7	8
to polyethylene		4	5
to Lever Arch File		2	2
to steel computer casing		1	2
to formica		8	9
to tupperware		5	10
<b>3. Chemical resistance of text</b>			
Fuel	60x	No visible effect	
Gasoline	60x	No visible effect	
Isopropylalcohol	30x	No visible effect	
Ethanol	10x	No visible effect	
Ethylacetate	10x	Printing gone	
Skydrol (hydraulic engine oil)	10x	Printing gone	
Sabesto (brake fluid cleaner)	10x	Printing gone	
Exxsol 40 (cleaning solvent)	60x	Printing gone	
ULS (cleaning solvent)	10x	Printing gone	
Ether	10x	No visible effect	
Acetone	60 x	Printing gone	
Toluene	60 x	Printing gone	
Dreft	60 x	Printing gone	
Water	60 x	Printing gone	
Vim	60 x	No visible effect	
General degreaser	10x	No visible effect	
Synthetic thinner	6 x	No visible effect	
White spirit	60 x	Printing gone	
Oil spots remover	6 x	Printing gone	
Cellulose thinner	6 x	No visible effect Printing gone	
Calgonit	60 x	Printing gone	
Sun brilliance	60 x	No visible effect	
Instanet	60 x	No visible effect	
Antikal	60 x	No visible effect	
Nafta	60x	No visible effect	
Workspace degreaser	6 x	Printing gone	
<b>Abrasion resistance of text</b>			
Pencil erasure	60x	Moderate print removal	
Polystyrene pin	60x	No visible effect	
Sandpaper	60x	Moderate print removal	

#### 4. UV light stability

30 days with UV filter in Atlas CPS+ Suntester No visible effect on text and background

(corresponds with one year real life outdoor exposure in direct sunlight in Central Europe)

30 days with window filter in Atlas CPS+Suntester No visible effect on text and background

(corresponds with one year real life exposure behind window glass in Central Europe)

#### 5. Temperature stability

Application temperature

No visible effect

Room temperature

No visible effect

Service temperature

No visible effect

30 days in consumer freezer

No visible effect

30 days at 90°C

No visible effect on text and background.

30 days at 120°C

Very slight discoloration of background. No visible effect on text.

#### 6. Humidity resistance of applied label

30 days at 45°C, 85 % R.H

No visible effect on text and background.

#### 7. Weatherability in QUV

30 days at 60°C

No visible effect on text and no fading of colors

#### 8. Shelf life of cassette

1 year at 5-25°C and 40-85% relative humidity when stored in its original packaging. We are confident that our product will perform well beyond this frame. However, it remains the responsibility of the user to assess the risk of using such product.

#### (2) Certifications and Standards Adherence

- To the best of our company's knowledge we declare that our products meet the most recent standards of the European Directives considering REACH and ROHS. None of the substances identified as "substance of concern" has been and will be contained in the product(s), listed on this Technical Data Sheet, to a higher level than mentioned in the European Directives considering REACH and ROHS.