

## Thermal Transfer Printable Transparent Polyester Tape

### PRODUCT SPECIFICATIONS:

#### Description:

Print Technology	Thermal Transfer
Adhesive	Acrylic
Standard Colors	Transparent with white printable area
Finish	Glossy
Service Temperature Range (printing)	From 5 to 35 degrees C
Recommended Application Temperature	15 degrees C or more
Storage Condition Range	From -10 to 40 degrees C

#### Thickness (mm)

	Transparent
Substrate	0.023
Adhesive	0.018
Colored layer	0.001
Liner	0.087
Total	0.129

### APPLICATIONS

Wire and cable identification

### REGULATORY/AGENCY APPROVALS

**UL:** Epson Polyester Transparent tape got an approval of UL969 when printed with a print ribbon which is contained in a tape cartridge. You can see the details on UL file MH49716, it is available on UL.com

**RoHS:** Epson Polyester Transparent Film label is RoHS compliant to Directive (2011/65/ EU) and (Annex II (EU) 2015/863) established on June 8, 2011.

### PROPERTIES

Properties		Test method	Average result	
Adhesion	Adhesion time	Compliance to JIS Z 0237(2000), peeling angle 180 degrees / peeling speed 300mm/min		
	Stainless Steel		20 min.	9.4N/25mm
			96 hours	14.1N/25mm
	Polypropylene		20 min.	2.8N/25mm
96 hours		2.8N/25mm		

Glass	20 min.		9.2N/25mm
	96 hours		18.7N/25mm
Vinyl chloride	20 min.		15.4N/25mm
	96 hours		20.0N/25mm
Acrylic	20 min.		11.7N/25mm
	96 hours		13.0N/25mm
Shear / Displacement		Putting on glass plate (adhesion area is 12 x 20 mm), then load 1kg to the label for 1 hour	0.3mm
Tack		Probe tack test with dia. 5mm probe	8.58N
UV Light resistance		Putting on stainless plate, then irradiance 40W/m <sup>2</sup> , B.P.T 63 degrees C and 50% RH, for 390 hours in Super Xenon Weather Meter (Suga SX75)	No visible effect
Weatherability		Repeat below 1 to 4 for 55 hours / 110 hours. 1. Irradiation for 10 hours 1.24kW/m <sup>2</sup> irradiance, B.P.T 63 degrees C and 50% RH 2. Spray for 1 minute 3. Dark and condensation for 1 hour 4. Spray for 1 minute  55 hours / 110 hours acceleration test equals to 1 year / 2 years of environment of Japan in metaling weather meter machine (SUGA M6T).	55 h: no visible effect 110 h: tape surface discoloration
Short Term High service temperature		Putting on stainless rod for 2 hours	
		200/225/250 degrees C	Printed text is legible but some discoloration on tube.
		150 degrees C	No visible effect
High Service Temperature		Putting on stainless rod at 50/100 degrees C for 240 hours.	No visible effect
Low Service Temperature		Putting on stainless rod	
		-70/-30 degrees C for 72 hours	No visible effect
		0 degrees C for 240 hours	

Abrasion Resistance	50 cycles on 500gf pressure by Japanese 10 Yen coin	No visible effect
	50 cycles on 2kgf pressure by plastic eraser.	

**CHEMICAL/ SOLVENT RESISTANCE**

Chemical reagents	Test method	Results
Toluene	Attach white area to glass rod, and laminate (wrap around) by transparent area, then sink in each chemical / solvent for 2 hours	No visible effect
Hexane		
Ethanol		
Acetone		
Mineral sprit		
0.1N Hydrochloric acid		
0.1 N Sodium hydroxide		
Ethyl acetate		
Engine oil		

Chemical reagents	Test method	Results
Toluene	Attach to glass plate, then rub with 500 gf pressure up to 50 times by cotton swab with chemical / solvent.	Peeling from rod and removing printed texts
Hexane		Peeling from rod and removing printed texts
Ethanol		No visible effect
Acetone		No visible effect
Mineral sprit		No visible effect
0.1N Hydrochloric acid		No visible effect
0.1 N Sodium hydroxide		No visible effect
Ethyl acetate		Peeling from rod and removing printed texts
Engine oil		No visible effect

Note:

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Product availability may vary by country. Please refer to your local Epson office for full details.

Note that the information about the characteristics, such as numeric values, described in this document are the evaluation results for information only, not for guarantees.