

# **Thermal Transfer Printable Vinyl Tape**

### **PRODUCT SPECIFICATIONS:**

#### **Description:**

Print Technology	Thermal Transfer
Material	Vinyl chloride
Adhesive	Acrylic
Standard Colors	White, Yellow
Finish	Matte
Print operating Range*1	15 degrees C or more
Service Temperature	From -40 to 90 degrees C
Storage Condition	From -10 to 40 and from 30% to 80% Relative Humidity

<sup>\*1:</sup> Print on a tape under this condition.

### Thickness (mm)

	White	Yellow
Substrate	0.080	0.080
Adhesive	0.020	0.020
Liner	0.073	0.073
Total	0.173	0.173

#### **APPLICATIONS**

General identification for indoor/outdoor usage, barcode label, caution or warning label.

#### **REGULATORY/AGENCY APPROVALS**

**UL/ cUL**: Epson Vinyl label (Black on White and Black on Yellow) is compliant to UL969 for Indoor use. You may refer to details on www.ul.com under file MH49716, Vol 1.

### Listed SKUs on MH49716, Vol 1:

SKU	Width	Ink color/ tape color
212VTBWPX	1/2" (12mm)	Black on White
218VTBWPX	3/4" (18mm)	
224VTBWPX	1" (24mm)	
236VTBWPX	1 1/2" (36mm)	
250VTBWPX	2" (50mm)	
B2++VTBWPX	1/2", 3/4", 1/2",1 1/2", 2"	

212VTBYPX	1/2" (12mm)	Black on Yellow
218VTBYPX	3/4" (18mm)	
224VTBYPX	1" (24mm)	
236VTBYPX	1 1/2" (36mm)	
250VTBYPX	2" (50mm)	
B2++VTBYPX	1/2", 3/4", 1/2",1 1/2", 2"	

Note: Some number might be added instead of "++".

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

## **PROPERTIES**

Properti	es	Test method	Average result
<u>Adhesive</u>			
Adhesion to	Time		
Stainless Steel	20 min.	Compliance to JIS (Japanese	21.4 N/25mm
	96 hours	Industrial Standards) Z 0237(2000),	21.1 N/25mm
Polypropylene	20 min.	pressure-sensitive adhesive tapes and	16.0 N/25mm
	96 hours	sheets testing.	14.4 N/25mm
Glass	20 min.	Peeling angle 180 degrees / peeling	16.2 N/25mm
	96 hours	speed 300mm/min	16.4 N/25mm
Vinyl chloride	20 min.		20.3 N/25mm
	96 hours		20.6 N/25mm
Acrylic	20 min.		17.2 N/25mm
	96 hours		18.6 N/25mm
<u>Tack</u>		Probe tack test with dia. 5mm probe	5.35 N
UV Light resistan	<u>ce</u>	Putting on stainless plate, then	No visible effect, such as peeling /
		irradiance 40W/m², B.P.T 63 degrees	cracking / discoloration / printed
		C and 50% RH, for 390 hours in Super	text removing.
		Xenon Weather Meter (Suga SX75)	
<b>Weatherability</b>		Repeat below 1 to 4 for 55 hours / 110	No visible effect, such as peeling /
		hours using Metaling Weather meter	cracking / discoloration / printed
		machine (SUGA M6T).	text removing.
		1. Irradiation for 8 hours	
		0.72kW/m² irradiance, B.P.T 83	
		degrees C and 50% RH	
		2. Spray water for 10 second	
		3. Dark and condensation for 4 hour	
		30 degree C and 50% RH	

High Service Temperature	Putting on glass plate at 90°C for 700	No visible effect, such as peeling /
	hours.	cracking / discoloration / printed
Low Service Temperature	Putting on glass plate at -40°C for 700	text removing.
	hours.	
Abrasion Resistance	50 cycles on 500gf pressure by	No visible effect
	Japanese 10 Yen copper coin	
	50 cycles on 2kgf pressure by plastic	No visible effect
	eraser.	

## Number of years of weather resistance

EPSON white vinyl labels are weather resistant for approximately 12 years, Yellow is 8 years.

Actual weather resistance depends on the conditions in which the product is used.

## **CHEMICAL/ SOLVENT RESISTANCE**

Chemical reagents	Test method	Results
Trichloroethane	Attach the label to glass plate, then sink	Failed
Sodium Hypochlorite	in each chemical / solvent for 10 minutes.	No Effect
Ammonia (10%)	After that leave for 30 minutes. Repeat 5	No Effect
Sulfuric Acid (10%)	sets.	No Effect
Hydrogen Chloride (30%)		No Effect
Salt Water (5%)		No Effect
Acetic Acid		Failed (after 4 times)
Sodium Hydroxide (50%)		No Effect
Terpene Cleaner		Failed (after 5 times)
Fomula409 (Cleaner)		No Effect
MIL-H-5606 Oil		No Effect
Mil 7808 Oil		No Effect
Brake Cleaner		No Effect
Fluid type rust preventive		No Effect
Brake Fluid DOT4		No Effect
Engine Oil		No Effect
Cleaning Solvent		No Effect
Acetone		Failed
Isopropyl Alcohol		No Effect
Ethanol		No Effect
Gasoline		No Effect
Jet fuel (JP-8)		No Effect
Toluene		Failed
Hexane		No Effect
Heptane		No Effect

Water	No Effect
Mineral Spirit	No Effect
Methanol	No Effect
Ethyl Methyl Ketone	Failed
Ethyl Acetate	Failed

#### 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.