TECHNICAL DATA SHEET

Avery Dennison™ FT T4020T is a double-sided adhesive system especially designed for the assembly of membrane switches. The range consists of mounting tapes and spacer tapes of different thicknesses. All these products have superior stay-flat and die-cutting properties. They are available in roll and sheet form.

CONSTRUCTION & TYPICAL APPLICATIONS

- Consists of a 12µ polyester film coated on both sides with a solvent based pure acrylic adhesive. It offers high tack, high peel properties and high shear resistance.
- Protected by 2 moisture stable paper liners.
- Assembly of Membrane Switch Panels.



Adhesion with Substrates			
Metal / Aluminum	High	Acrylic / PET	Medium
Glass / Ceramics	High	Polystyrene	Medium
Painted Surface	High	PP / PE / PS	Medium
Wood / Board / Paper	Medium	Textile / Cotton	Medium
Soft PVC	Medium	Rubber / EPDM	Medium
Rigid PVC	Medium	Smooth Substrate	High
PC / ABS	High	Rough Substrate	Medium

Chemical Properties			
Copper corrosiveness N.A.	N.A.	Resistant to:	
Chlorine contents (ppm)	< 100	Water	Good
Sulphur contents (ppm)	< 100	Detergents	Good
		Dilute acids & alkalis	Good
		Concentrated alkalis	Poor
		Concentrated acids	Poor
		Aliphatic hydrocarbons	Good
		Ketones & esters	Fair
		Chlorinated hydrocarbons	Poor
		Aromatic Hydrocarbons	Poor

SHELF LIFE

- 2 years when stored at 15/25 °C and ± 50 % relative humidity.

AVERY DENNISON | Performance Tapes

Classification: Avery Dennison - Public

Electrical Properties			
Dielectric strength (Kv/mm)	At 23°C (50Hz)	380	DIN 40634
Surface resistivity (Ω)	At 23°C (50% RH)	> 10^{14}*	DIN 53482
Volume resistivity (Ω cm)	At 23°C	10^{18}*	DIN 40634
Permittivity	At 23°C (50Hz)	3.3	DIN 40634
	At 23°C (1 KHz)	3.3	
	At 23°C (1MHz)	3.2	
	At 0°C (50Hz)	3.3	
	At 50°C (50Hz)	3.3	
	At 100°C (50Hz)	3.3	
	At 150°C (50Hz)	3.6	
Power factor	At 23°C (50Hz)	0.002	DIN 40634
	At 23°C (1 KHz)	0.005	
	At 23°C (1 MHz)	0.021	
	At 0°C (50Hz)	0.004	
	At 50°C (50Hz)	0.001	
	At 100°C (50Hz)	0.007	
	At 150°C (50Hz)	0.005	

*Measured on a 12µ thick foil.

ADHESIVE DATA	Typical Values*	Test Method
Quick Tack (N/25 mm) on brushed stainless steel (ref. Nokoro 304 poli. N°4)	19	FTM 9
Peel 180° (N/25 mm) on brushed stainless steel (ref. Nokoro 304 poli. N°4)		
- After 20 min	20	FTM 1
- After 24 hr	21	FTM 1
Shear on brushed stainless steel (ref. Nokoro 304 poli. N°4) 1kg – 25mm x 25mm (hours)	> 1000	FTM 8
CARRIER DATA	**Typical Values***	**Test Method**
Thickness (µ)	12	ISO 534
Tensile (N/15 mm)	MD 25 CD 27	DIN 53455
Elongation (%) (max)	MD 180 CD 180	DIN 53455
TEMPERATURE RESISTANCE	**Typical Values***	**Test Method**
Minimum Application Temperature	+ 5 °C	
End-use Temperature Range	- 40 °C to + 180 °C	
Short Term Resistance		
RELEASE LINER	**Typical Values***	**Test Method**
White PE Coated Kraft Paper	100 gr/sqm, non printed	ISO 536
White PE Coated Kraft Paper	100 gr/sqm, printed in grey	ISO 536
THICKNESS	**Typical Values***	**Test Method**
Carrier + Adhesive	90 µ	ISO 534

*Values given are typical and are not necessarily for use in specifications

APPLICATION TECHNIQUES

- It is essential, as with all pressure-sensitive tapes, that the surface to which the tape is applied be clean, dry, and free of grease or oil
- Bond strength is dependent upon the amount of adhesive-to-surface contact developed
- Note that different pressure, time and temperature on different (film / rigid) surface achieves different performance

IMPORTANT NOTICE

Information on the above characteristics is based upon tests we believe to be reliable. The values given are typical values that vary according to application conditions. The values are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine prior to use the suitability of this material for their specific purposes. All Avery Dennison materials described herein are sold subject to Avery Dennison Conditions of Sales, a copy of which is available upon request.

For more information on our bonding tapes and adhesive solutions, call us:

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