

## TECHNICAL DATA SHEET

**Avery Dennison™ FM 503L** is a 920 µ m black foam tape with double coated pure acrylic adhesive on both sides. It has good tack and very high shear properties. FM 503L is suitable for badge and emblem mounting in automobiles.

### FEATURES

- Double coated polyethylene foam carrier
- Pure acrylic adhesive skin
- Controlled release PE liner

### BENEFITS

- Proven performance through multiple years of use
- Easy to die-cut properties allow for even small die-cut pieces



### CONSTRUCTION

**Liner:** Blue polyethylene

**Adhesive 1:** Pure acrylic adhesive

**Carrier:** Black closed cell polyethylene foam 185kg/m<sup>3</sup>

**Adhesive 2:** Pure acrylic adhesive

**Adhesive Properties**

**Typical Values**

THICKNESS (ASTM D3652)		US Mil's	MM's	Micron's (µm)
Liner		3.94	0.100	100
Carrier & Adhesive		36.22	0.920	920
Total Caliper		40.16	1.020	1020
<b>PEEL ADHESION (ASTM D3330)</b>				
90° (12") 300 mm / min @ Room Temp, 50µ aluminium reinforced				
<b>SUBSTRATE</b>		<b>Lbf / in</b>	<b>US Oz / In</b>	<b>N / Meter</b>
Automotive MSE Clear Coat	24 hr dwell	4.57	73	800
Automotive LSE Clear Coat	24 hr dwell	2.28	37	400
<b>LOOP TACK (ASTM D6195)</b>				
(12") 300 mm / min @ Room Temp				
<b>SUBSTRATE</b>		<b>Lbf / in</b>	<b>US Oz / In</b>	<b>N / Meter</b>
Glass	Initial			
<b>DYNAMIC SHEAR (ASTM D1002)</b>				
1"sq (6.25 cm <sup>2</sup> ) 2mm/min @ Room Temp				
<b>SUBSTRATE</b>		<b>kPa</b>		
Stainless Steel - Automotive MSE Clear Coat	24 hr dwell	700		
<b>PLUCK ADHESION (ASTM D897)</b>				
Aluminum 1" 180° 0.5" / min				
<b>SUBSTRATE</b>		<b>kPa</b>		
MSE Clearcoat	24 hr dwell	800		
<b>STATIC SHEAR (ASTM D3654)</b>				
1"sq (6.25 cm <sup>2</sup> ) 5000 g @ Room Temp				
<b>SUBSTRATE</b>		<b>Min to Fail</b>		
Stainless Steel 6.25 cm <sup>2</sup> - 1000g - RT	24 hr dwell	> 10,000 mins		
Stainless Steel 6.25 cm <sup>2</sup> - 500g - 80°C	24 hr dwell	> 10,000 mins		
<b>TEMPERATURES</b>		<b>°F</b>	<b>°C</b>	
Minimum Application Temperature		50 °F	10 °C	
Short Term (1 cm <sup>2</sup> - 100g - 240 mins)		230 °F	110 °C	
Long Term (6.45 cm <sup>2</sup> - 500g - 10,000 mins)		194 °F	90 °C	

Note: The listed values are typical only and not intended to serve as product 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

**STORAGE / SHELF LIFE**

Two years when stored at 64-72 °F (18-22 °C) / 30-70 % relative humidity, out of direct sunlight and in original

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

**North America:** +1 866 462 8379

**Asia Pacific:** +86 512 57155001

**Europe:** +32 (0)14 40 48 11

[www.tapes.averydennison.com](http://www.tapes.averydennison.com)

packaging.

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