



# Technical Data Sheet

## Pres-On S-500 Acrylic and S-700 Silicone Foam Tapes

- Highly versatile, medium firmness silicone in red, gray or black
- Combines foam lightness with sealing of traditional sponge rubber
- Excellent memory and low stress relaxation
- Resists UV light, ozone, extreme temperatures, corrosion and flame
- Prevents penetration of fine particles and wind-driven rain
- Ideal for sealing and protecting outdoor communications, electronics and HID lighting enclosures from environmental damage

### GENERAL DESCRIPTION

S-500 (Acrylic PSA)  
S-700 (Silicone PSA)

Our medium density silicone foam tapes are available in several thicknesses and lengths. Your choice of either pressure-sensitive acrylic adhesive (S-500) or pressure-sensitive silicone adhesive (S-700) is available. UL recognized for flame retardance and gasketing. Other densities available as well as pressure-sensitive adhesives on one or two sides.

### APPLICATIONS

Outdoor enclosures such as HID lighting fixtures, electronics cabinets, and HVAC units. Isolates vibration in electronic components and vehicles.

### STANDARD ROLL SIZES

All rolls available in widths from 1/8" to 36"

Colors: Red, Gray, Black

SERIAL NUMBER	THICKNESS	LENGTH
S503 (acrylic adhesive)	1/32"	60'
S506 (acrylic adhesive)	1/16"	60'
S509 (acrylic adhesive)	3/32"	60'
S512 (acrylic adhesive)	1/8"	60'
S518 (acrylic adhesive)	3/16"	40'
S525 (acrylic adhesive)	1/4"	40'
S537 (acrylic adhesive)	3/8"	20'
S550 (acrylic adhesive)	1/2"	20'
S703 (silicone adhesive)	1/32"	60'
S706 (silicone adhesive)	1/16"	60'
S709 (silicone adhesive)	3/32"	60'
S712 (silicone adhesive)	1/8"	60'
S718 (silicone adhesive)	3/16"	40'
S725 (silicone adhesive)	1/4"	40'
S737 (silicone adhesive)	3/8"	20'
S750 (silicone adhesive)	1/2"	20'

### PERFORMANCE

TEST	TYPICAL PERFORMANCE	TEST METHOD
<b>ACRYLIC ADHESIVE (S-500)</b>		
Construction	3.0 mil Acrylic	
Release Liner	90# coated kraft	
Peel Adhesive-20 minute dwell	50 oz/inch	PSTC-1
Static Shear @ 72°F 1 x 1 x 500 grams	+100 hours	PSTC-7
Water and Humidity Resistance	excellent	Pres-on PTM-3
Service Temperature	-31° to 149°C (-25° to 300°F)	
Shelf Life	1 year stored at room temperature	
<b>SILICONE ADHESIVE (S-700)</b>		
Construction	3.5 mil silicone	
Release Liner	2 mil polyester film	
Adhesion to Steel @ 72°F (20 min. dwell)	32 oz/inch	PSTC-1
Static Shear @ 72°F 1 x 1 x 250 grams	+24 hours	PSTC-7
Water and Humidity Resistance	excellent	Pres-on PTM-3
Service Temperature	-50°C to 250° C (-58°F to 530°F)	Pres-on PTM-2
Shelf Life	6 months stored at room temperature	

**PHYSICAL PROPERTIES**

PROPERTY	TEST METHOD	UNIT OF MEASURE	RESULT
<b>PHYSICAL PROPERTIES</b>			
Density	ASTM D 1056	lb/ft	22
Tensile Strength	ASTM D 412	psi	45 (310)
Elongation	ASTM D 412	%	80
Compression Set	ASTM D 1056	%	
	Test D @ 158°F (70°C)		<1
	Test D @ 212°F (100° C)		<5
Compression Deflection @25% deflection	ASTM D 1056	psi	9.0 (62.0)
<b>FLAMMABILITY &amp; OUTGASSING PROPERTIES</b>			
Flame Resistance	UL 94		V-0 and HF-1
Flame Spread Index	ASTM E 162	L <sub>s</sub>	<25
Smoke Density	ASTM E 662	L <sub>s</sub>	
	Tested @ 4.0 minutes		<50
	Tested @ 1.5 minutes		<20
Toxic Gas Emissions	SMP-800C		Pass
<b>ENVIRONMENTAL PROPERTIES</b>			
Meets Requirements of FDA CFR 177.2600 For Food Contact			
Water Absorption	24 hrs @ room temp	%	1.4
UV Resistance	SAE J-1960		No degradation
Ozone Resistance	ASTM D 1171		0 (no cracks)
Corrosion Resistance	AMS-3568		Pass
<b>ELECTRICAL &amp; THERMAL PROPERTIES</b>			
Dielectric Constant	ASTM D 150		1.42
Dielectric Strength	ASTM D 149	Volts/mil	91
Dry Arc Resistance	ASTM D 495	seconds	92
Volume Resistance	ASTM D 257		10 <sup>14</sup>
Thermal Conductivity	ASTM C 518	BTU in/hr/ft <sup>2</sup> /°F (w/m °K)	0.63 (0.09)
<b>TEMPERATURE RESISTANCE</b>			
Flex @ -67°F (-55°C)	ASTM D 1056		Pass
Recommended Temp	SA J-2236	-60°F to 390°F (-55°C to 200°C)	
Recommended High Temp		482° F (250°C)	

1. This information is furnished as a guide for selecting materials. Pres-On disclaims liability for results or use of this information. It is the customer's responsibility to obtain and test samples when determining suitability of material for a particular application.
2. Information and specifications are based upon research and believed to be true but do not constitute a warranty. Pres-On products are sold with the understanding that the purchasers will determine the suitability of the materials for their purpose. Pres-On will supply samples for your testing and evaluation.

**APPLICATION NOTES**

Thoroughly clean contact surface before use. Therefore, position tape carefully, assuring complete contact with all surfaces. Test product for system compatibility as individual application conditions can impact results. Pres-On does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product(s) or any final product into which the product(s) may be incorporated by the purchaser and/or user. The purchaser and/or user should perform its own tests to determine the suitability and fitness of the product(s) for the particular purpose desired in any given situation.