



LEADERS IN HIGH PERFORMANCE TEXTILES FOR THERMAL PROTECTION

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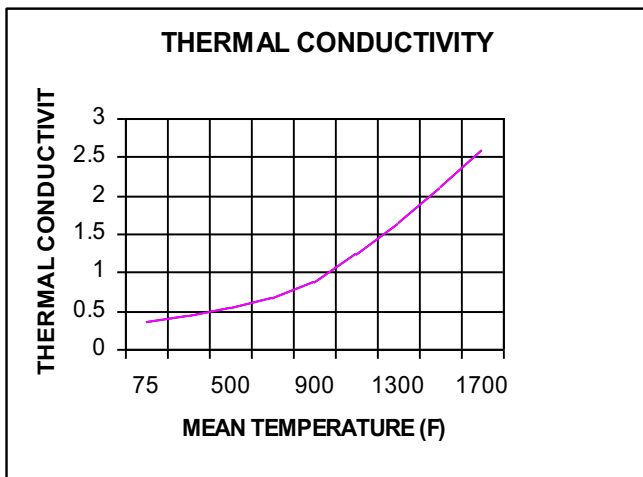
## AVSiI® PRESHRUNK SILICA NEEDED INSULATION

**AVSiI® Preshrunk Silica Needed Insulation** is manufactured from amorphous silica fibers and is typically used in a wide range of critical, high temperature aerospace, automotive, and industrial applications. **AVSiI® Preshrunk Silica Needed Insulation** is designed to withstand temperatures of up to 2000°F (1093°C), and is comprised of non-respirable, 9-micron filament fibers that are mechanically bonded, containing no added resins or adhesives. The nominal density of **AVSiI® Preshrunk Silica Needed Insulation** is 8 lb./ft<sup>3</sup>. The areal shrinkage is less than 4.0 percent. **AVSiI® Preshrunk Silica Needed Insulation** contains no shot and is environmentally-friendly since it contains no harmful refractory ceramic fibers (RCF). It can easily be fabricated into textile parts due to handling and strength properties.

### ROLL PROPERTIES (SHRUNK INSULATION)

Product	Thickness		Density		Width		Roll Length		Area	
	Inches	mm	lb/ft <sup>3</sup>	kg/m <sup>3</sup>	Inches	cm	Feet	Meters	ft <sup>2</sup>	m <sup>2</sup>
AB25S	0.250	6.35	8	130	36	91.4	116	35.4	350	32.5
AB50S	0.500	12.7	8	130	36	91.4	58	18	177	16.5
AB100S	1.00	25.4	8	130	36	91.4	33	10	100	9.3

**THERMAL CONDUCTIVITY**  
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Temperature °F	Apparent Thermal Conductivity*	
	Btu-in/hr-ft <sup>2</sup> -°F	W/m <sup>2</sup> -°K
75 (24°C)	0.37	0.053
300 (149°C)	0.44	0.064
500 (260°C)	0.54	0.077
700 (371°C)	0.67	0.096
900 (482°C)	0.89	0.129
1100 (593°C)	1.23	0.178
1300 (704°C)	1.66	0.240
1500 (816°C)	2.13	0.309
1700 (927°C)	2.60	0.379

\*Typical Values

AVS Industries, LLC cannot predict all of the potential applications for which customers may attempt to use the **AVSiI®** Silica Needed Insulation. **AVSiI®** Silica Needed Insulation will have varying degrees of effectiveness for each potential application depending on the maximum temperature attained, the length of use, and the amount of temperature fluctuation. If the customer has any questions regarding the use of **AVSiI®** Silica Needed Insulation in a particular application, please contact AVS Industries, LLC at (302) 221-1720 and we will provide a sample of **AVSiI®** Silica Needed Insulation for testing. This product is not warranted against injuries or damages of any kind caused by uses for which this product was not designed, intended, or tested by AVS Industries, LLC.