

**DESCRIPTION**

willmid SF-10 polyimide solimide® foam is a lightweight, semi rigid foam with an extremely wide operating temperature range, Extraordinary burn resistance, minimal smoke emission, excellent sound absorption, and excellent thermal insulation properties.

**TYPICAL APPLICATIONS**

Used as acoustical and thermal insulation in aircraft, boats and aerospace industry. willmid has excellent acoustical properties, good thermal insulation, fire resistant, very low smoke, virtually no out gassing, wide performance temperature range (-300°F to + 500°F), light weight, ease of fabrication/installation and durability.

PHYSICAL PROPERTIES

TYPICAL VALUES

TEST METHODS

Density	0.55 lbs/ft <sup>3</sup>	ASTM D3574 Test A
Compression Force Deflection At 25%	.41 lbs/50in <sup>2</sup>	ASTM D3574 Test C
Thermal Stability, Weight Loss at 400°F	0.7%	TGA
Continuous Service Temperature, 1,000 Hours at 500°F	52% Tensile Loss	
Apparent Thermal Conductivity At 75°F (K-factor)	0.30 (BTU in) / (hr-ft <sup>2</sup> -°F)	ASTM C518
Thermal resistivity at 75°F (R-factor), 1" thick	3.15 (hr-ft <sup>3</sup> -°F)	ASTM C518
Water Vapor Absorption	.008 lbs/ft <sup>3</sup>	7 Days, 150°F, 90% RH, 1" Thick

Acoustical Properties

Absorption Coefficient (ASTM C423)

Thickness	Frequency (Hz)				
	500	1000	2000	4000	NRC
1"	0.68	1.13	0.91	0.98	0.75
2"	1.03	0.95	0.86	0.88	0.85

<u>Flammability</u>	<u>Typical Values</u>	<u>Test Methods</u>
Oxygen Index	31%	ASTM D2863
Smoke Emission: D at 4.0 minutes	2	FAR 25.853(d) Appendix F, Part V
Vertical Burn		
-Flame Time	0 seconds	FAR 25.853(a)
-Burn Length	1.6 inches	Appendix F Part I, (a)(1)(I)
-Dripping	none	

Sheet Dimensions

Typical Tolerance

Width X Length

48" X 98"

Minimum Dimensions

Custom Sizes

0 – 20"

+/- 0.06"

20" – 40"

+/- 0.125"

40" – 98"

+/- 0.250"

Thickness

0.1" – 0.5"

+/- 0.02"

0.5z – 1.0"

+/- 0.04"

1.0" – 2.0"

+/- 0.06"

3.0" – 4.0"

+/- 0.08"

The data and information above represents typical values that are generally accepted throughout the industry and appear in manufacturer's literature. Actual physical properties may vary by manufacturing lot. These values do not constitute a guarantee of performance, actual or implied. The suitability of this product may be application specific and should be determined prior to being specified.

For more information, contact pinta-foamtec, inc. at (800)438-0678.