

DESCRIPTION

Microlite® AA Blankets are lightweight, flexible, thermal and acoustic insulating materials designed for use where space and weight savings are a critical consideration.

Microlite AA Blankets are furnished with a water repellent thermosetting phenolic binder which is flame resistant and non-punking, and provide excellent dimensional stability. An additive is used to provide water repellency to the cured blanket for service in areas where high altitude moisture condensation may occur. In circumstances where moisture is not a concern, plain phenolic binder can be specified.

ADVANTAGES

Microlite AA Blankets offer superior acoustic and thermal performance per unit weight of insulation used. AA blankets are phenolic bonded, noncombustible, and easily meet the most stringent smoke density, smoke toxicity and total heat release standards.

Because Microlite AA Blankets are non-cellular and moisture-resistant, they will not support biological growth or vermin. They also provide excellent stability with age. The exceptional resiliency of the glass fibers prevents vibrational settling and retains their excellent sound attenuation and thermal properties.

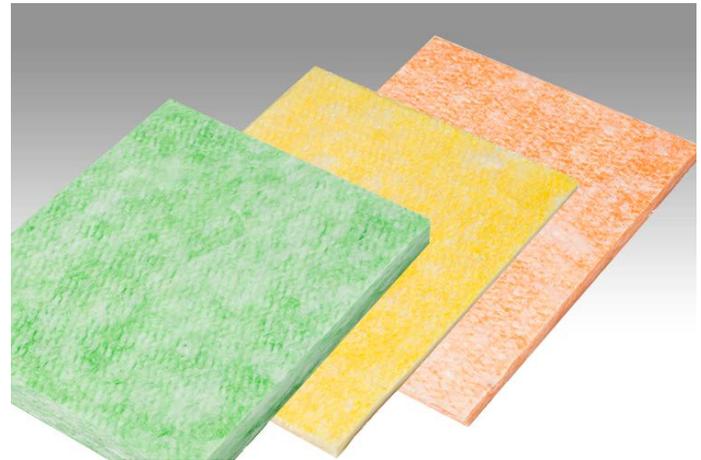
AVAILABLE FORMS

Standard Microlite AA Blankets are furnished in different densities, in 72" wide rolls, with a water repellent binder. If Microlite AA with plain phenolic binder is desired, it is available on a made-to-order basis.

STANDARD THICKNESSES & DENSITIES

Apparent Density		Thickness		Color
lbs/ft ³	kg/m ³	in	mm	
0.42	6.7	½ & 1	12.7 & 25.4	Amber
0.60	9.6	½ & 1	12.7 & 25.4	Green
1.00	16.0	1	25.4	Orange
1.50	24.0	¾	9.5	Amber

* Other sizes may be available upon request.



TYPE

Flexible Blanket

TEMPERATURE LIMIT

450°F (232°C)

APPLICATIONS

Formed from resin bonded borosilicate 902 biosoluble glass fibers, Microlite AA Blankets provide optimum thermal and acoustic insulating performance for applications up to 450°F. These blankets help control thermal and acoustic transmission in a variety of aerospace applications, and are particularly well suited for insulating the fuselage wall cavities of commercial and private aircraft.

- Aerospace
- Fuselage Wall Cavities of Aircraft

PROPERTIES

- Biosoluble Chemistry
- Superior Acoustics
- Water Repellent
- Low Heat Transfer
- Noncombustible
- Excellent Dimensional Stability
- Exceptionally Low Smoke and Toxicity

MICROLITE® AA BLANKETS

AIRCRAFT ACOUSTIC AND THERMAL INSULATION

DATA SHEET

THERMAL CONDUCTIVITY (Btu • In.)/(Sq. Ft. • Hr. • °F) (ASTM C-518)

Density (lbs./cu. ft.)	Mean Temp. °F (between hot surface and cold surface)					
	50°	75°	100°	200°	300°	400°
0.42	0.25	0.28	0.30	0.38	0.47	0.64
0.6	0.24	0.25	0.27	0.35	0.42	0.55
1.5	0.21	0.22	0.23	0.28	0.32	0.38

THERMAL CONDUCTIVITY (Watts/Meter • °C) (ASTM C-518)

Density (kg/m ³)	Mean Temp. °C (between hot surface and cold surface)					
	10°	24°	38°	93°	149°	204°
6.7	0.036	0.040	0.043	0.055	0.068	0.092
9.6	0.035	0.036	0.039	0.051	0.061	0.079
24.0	0.030	0.032	0.033	0.040	0.046	0.055

SOUND ATTENUATION (Sound Transmission Loss dB) (ASTM E-90)

Density		Thickness*		Frequency (Hz)				
pcf	kg/m ³	in	mm	250	500	1000	2000	4000
0.42	6.7	1	25	3.9	6.0	10.8	14.5	19.8
0.60	9.6	1	25	5.4	7.2	14.1	20.1	27.2
1.5	24	.375	9.5	6.5	7.4	13.8	19.7	26.5

*Test conducted on 3 layers of insulation, per ASTM E90

ANECHOIC TEST CHAMBER

An intensity probe is used for both scanning and point to point mapping of power radiated from a simulated aircraft fuselage. Such techniques measure the attenuation of the overall system as well as the performance of specific elements within the construction.

COMPLIANCE WITH GOVERNMENT & EXTERNAL SPECS

- ABS 5630
- ASTM C-800 (replacing MIL-B-5924)
- BMS 8-48
- DMS 2151
- DMS 1967
- FAR 25.853
- FAR 25.856A
- OSU 65/65



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**PRODUCT & TECHNICAL
INFORMATION**

800-654-3103

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of Microlite AA Blankets listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800) 654-3103.