

DESCRIPTION

Microlite® AA Premium NR is a lightweight, flexible, thermal and acoustic insulation material designed to provide the ultimate in noise reduction at minimal weight. Microlite AA Premium NR blankets are formed from resin-bonded borosilicate 902 biosoluble glass fibers.

ADVANTAGES

Microlite AA Premium NR offers performance similar to standard Microlite AA at 20% less weight. Microlite AA Premium NR blankets, bonded with a thermosetting phenolic resin, are noncombustible and meet industry and government standards for smoke density, smoke toxicity and total heat release. Microlite AA Premium NR is water repellent and will not support biological growth.

AVAILABLE FORMS

Microlite AA Premium NR Blankets are furnished in three different densities in rolls up to 72" wide.

STANDARD THICKNESSES & DENSITIES

Apparent Density		Thickness	
lbs/ft ³	kg/m ³	in	mm
0.34	5.5	1	25.4
0.50	8.0	1	25.4
1.20	19.2	3/8	8.5



TYPE

Flexible Blanket

TEMPERATURE LIMIT

450°F (232°C)

APPLICATIONS

Microlite AA Premium NR reduces thermal and acoustic transmission in a variety of aerospace applications. These blankets are particularly well suited for insulating the fuselage wall cavities of commercial and business aircraft.

- Aerospace
- Fuselage Wall Cavities of Aircraft

PROPERTIES

- High Noise Reduction
- Water Repellent
- Excellent Thermal Performance
- Biosoluble Chemistry
- Noncombustible and Non-Pinking
- Excellent Strength and Stability
- Low Smoke Density and Toxicity



MICROLITE® AA PREMIUM NR BLANKETS

AIRCRAFT THERMAL AND ACOUSTIC INSULATION

DATA SHEET

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

Apparent Density (lbs./cu. ft.)	Mean Temp. °F (between hot surface and cold surface)					
	50°	75°	100°	200°	300°	400°
0.34	0.27	0.28	0.31	0.42	0.55	0.71
0.5	0.24	0.25	0.27	0.35	0.45	0.58
1.2	0.21	0.21	0.24	0.29	0.36	0.44

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

Apparent Density (kg/m ³)	Mean Temp. °C (between hot surface and cold surface)					
	10°	24°	38°	93°	149°	204°
5.5	0.039	0.040	0.045	0.061	0.079	0.102
8.0	0.035	0.036	0.039	0.051	0.065	0.084
19.2	0.030	0.030	0.035	0.042	0.052	0.064

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

Density		Thickness*		Frequency (Hz)					
pcf	kg/m ³	in	mm	125	250	500	1000	2000	4000
0.4	5.5	1	25	4.0	3.1	5.0	9.6	15.0	21.4
0.5	8.0	1	25	4.9	3.7	6.1	13.3	23.4	36.1
1.2	19.2	0.375	9.5	4.8	4.0	4.8	9.5	17.9	29.8

*Test conducted on 3 layers of insulation, per ASTM E-90

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 SPECIFICATIONS

- ABS 5630
- BMS 8-48
- DMS 2385
- 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 Premium NR 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.