

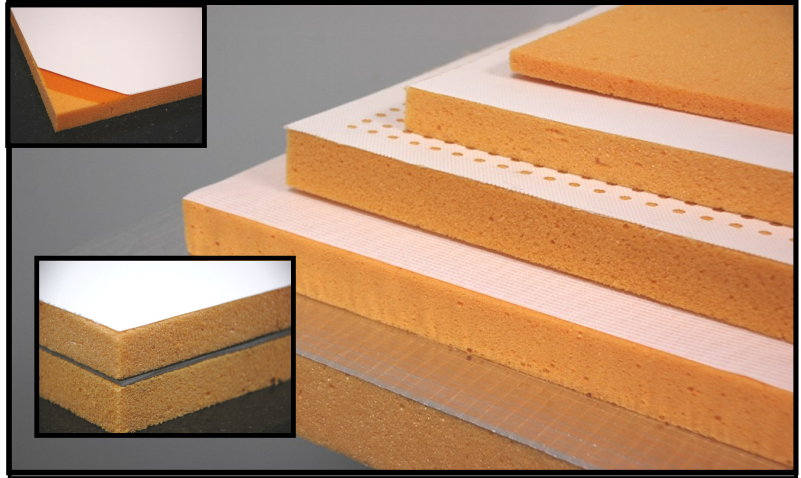
AMSN Polyimide Foam

- AMS Network, LLC offers a complete portfolio of thermal, acoustic and passive fire insulation materials for shipboard applications and uses. These products are thoroughly tested and certified to the IMO, USCG, ASTM, Commercial and Military specifications required by today's shipbuilders.
- AMSN polyimide foam is manufactured using state of the art blending and processing equipment that controls the cell structure in such a manner as to produce a flexible open cell polyimide foam that has consistent density, thermal conductivity and sound absorption properties, as well as the inherent fire resistant and low smoke characteristics of polyimide foams.
- AMSN products are produced under a quality control system meeting Mil-I-45208A. AMSN polyimide products are in full compliance to DOD-I-24688, Type 1 and Type 2, Classes I & II; ASTM C1482 and ASTM C1594.

POLYIMIDE Specifications per DOD-I-24688

Density kg/m ³ (lb/ft ³) per ASTM D 3574, Test A.	10.24 (.64)
Thermal Conductivity W/(m-K) (BTU-in/hr-ft ² -°F) per ASTM C 518 @ 24°C (75°F)	.046 (.32)
Fire Resistance 1/4 Scale Fire Test per Appendix DOD-I-24688 Specific Optical Smoke Density Flaming Non Flaming per ASTM E 662	PASS <5 <5

AMSN Polyimide Foam Products



PF-PL	Plain polyimide foam to Ty 1
PF-CF	Navy Cloth faced to Ty 2, Class 1
PF-GR	Grooved & Perforated CF to Ty 2, Class 2
PF-WM	PF-PL faced per Mil-I-22023 Ty 3
PF-AM	PF-PL faced with aluminized Mylar
PF-PAF	PF-PL faced with white corrugated and perforated aluminum sheathing

Sound Absorption Coefficient per ASTM C-423 Type A

Material	Frequency (Hz)						
	125	250	500	1000	2000	4000	NRC
PF-PL 1/2"	.04	.07	.20	.40	.35	.55	.50
PF-PL 1"	.06	.20	.45	.65	.65	.65	.75
PF-PL 2"	.15	.40	.75	.75	.75	.70	.80
PF-GR 1/2"	.05	.15	.35	.50	.60	.60	.75
PF-GR 1"	.07	.25	.70	.90	.75	.70	.75
PF-GR 2"	.25	.70	.90	.85	.75	.75	.75

AMSN Polyimide Products

- AMSN Polyimide is available either plain, or laminated with protective or acoustic facings. These facings include fiberglass cloth (CF), reinforced Mylar (WM), perforated fiberglass cloth (GR), aluminized Mylar (AM), Kapton (KCF), perforated & corrugated aluminum (PAF) and fiberglass with aluminized Mylar (AM/CF).
- AMSN Polyimide is available as an open cell flexible Thermal and Acoustic foam for standard bulkhead, deck and overhead applications, as a filler material for Submarine Transmission Loss Treatments (TLT) or as a filler material for TLT Type 3 Surface Ship Transmission Loss Treatments utilizing vinyl, barium sulphate, silicone or
- AMSN Polyimide with PAF is a Type G habitability ceiling panel that fits standard 2'x2' or 2'x4' grids. The PAF is white corrugated (.020" x 1/4" center 1/8" depth) and perforated (1/8" diameter on 21/64" centers) aluminum sheathing. Type A panels have the PAF laminated to 1/2" PS-PL. Type B panels are Type A panels with a 1-1/2" fiberglass blanket insert.

AMSN Polyimide Features & Benefits

Extremely Lightweight Use of polyimide instead of conventional insulations gives shipbuilders a lower installed cost, and lower life cycle costs due to the ease of installation and handling.

Flame Resistant Polyimide is inherently fire resistant and produces virtually no toxic products of combustion when exposed to open flames.

Halogen Free Polyimide is halogen free.

Improved 'k' and NRC AMSN Polyimide is manufactured using state of the art blending and processing equipment resulting in consistent cell structure. This allows for better thermal and acoustic performance.

Installation is Easy Polyimide increases productivity and is more cost effective than conventional insulations. It is easily cut and handled and there are fewer mechanical fasteners required than with fibrous materials.

Improved Durability Polyimide products maintain their integrity after long term exposure to vibration and have a high degree of chemical stability.

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