

TECHNICAL DATASHEET: Polyimide Foam with Rubber Adhesive and Aluminum Foil

PRODUCT DESCRIPTION

Polyimide is a lightweight, non-wicking, thermal and acoustic insulation foam utilized where low fire, toxicity and smoke generation are critical. The rubber PSA is designed for difficult bonding applications and has excellent quick stick and shear properties for permanent bonding applications on foams, plastics, metals and composite materials subjected to a broad range of temperatures. The aluminum foil has high temperature resistance and exhibits no afterglow or foil rupture exceeding the area of direct flame contact-self-extinguishing.

TYPICAL APPLICATIONS

- Aircraft and aerospace applications including aircraft fuselage, under floor, ECS ducts and equipment
- Oven Insulation, vent duct insulation and many more where temperature resistance is critical
- · Great for sound damping
- · Excellent acoustic absorption

PRODUCT FEATURES & BENEFITS

- Excellent long-term stability under humid conditions and after temperature cycling
- · Formaldehyde free
- · Easily die-cut
- Emits virtually no smoke or toxic-by-products when exposed to open flame
- · Lightweight yet durable
- Rubber adhesive meets adhesive requirements of GM3622, CHRYSLER MS-CC211 and DELPHI SD2-324
- · Aluminum foil meets FMVSS-302 requirements

TECHNICAL DATA	VALUE	TEST METHOD / STANDARD
THICKNESS	1/2"	
BACKING/CARRIER	60# densified kraft	
ADHESIVE SYSTEM	Permanent Adhesive	
ADHESIVE SIDE	Single Sided Adhesive	
ADHESIVE TYPE	Rubber (SLM360)	
COLOR	Light Yellow	
PEEL ADHESION	96 oz/inch	PSTC-101
COLD WEATHER FLEXIBILITY	Good	
MATERIAL / SUBSTRATE	Polyimide Foam	
DENSITY	0.44 lb/ft ³	ASTM D3574 (TEST A), ISO 845
SMOKE DEVELOPED INDEX FLAMING & NON-FLAMING MODES	<5	ASTM E662
MAXIMUM CONTINUOUS USE TEMPERATURE	400°F	
MAXIMUM CONTINUOUS USE TEMPERATURE, RUBBER ADHESIVE	180°F	
MINIMUM CONTINUOUS USE TEMPERATURE, RUBBER ADHESIVE	-10°F	



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THERMAL CONDUCTIVITY @ 75°F	0.32 btu/(h·ft²·°F)	ASTM C518
TENSILE STRENGTH	20 lb/in	ASTM D822
OFFGASSING/OUTGASSING TMI	< 1.0 %	ASTM E595
OFFGASING/OUTGASSING CVCM	< 0.1 %	ASTM E595
FAR 25.856 (a) - (FAA RADIANT PANEL)	Pass	
FLAME RETARDANT	Yes	
FMVSS-302	Pass	
ASTM C1482	Yes	
BOEING BMS 8-300	Yes	
BOEING (DOUGLAS) DMS 2330	Yes	
BOMBARDIER BAMS 544-006	Yes	
HAMILTON SUNDSTRAND HS 14190	Yes	
LOCKHEED MARTIN LAC 23-4831	Yes	
MULLEN BURSTING STRENGTH	40 psi minimum	ASTM D774
NOISE REDUCTION COEFFICIENT (NRC), 1 IN	0.75	ASTM C423
NOISE REDUCTION COEFFICIENT (NRC), 1 IN	0.75	ASTM E795, MOUNTING A
BASIS WEIGHT, ALUMINUM FOIL	20 lbs/msf	