

SOUNDFOAM HTC





Soundfoam HTC with Kapton® film

PRODUCT DESCRIPTION

Soundfoam HTC is a lightweight, flexible, open cell, polyimide based foam having excellent resistance to heat, flame, and humidity. It exhibits a very low degree of flammability. It does not drip upon ignition, ceases to burn after removal of source of ignition, and produces a minimum amount of smoke. Soundfoam HTC is recommended when light weight, heat resistance, and fire safety is of utmost concern.

PRODUCT CONFIGURATIONS

- Decorative and protective finishes:
 - Kapton®
 - Reinforced aluminized polyester film
 - Tedlar®
 - Nomex®/Tedlar® fabric

MARKETS



TYPICAL APPLICATIONS

· Launch vehicles, satellites, engine power systems, planes, and helicopters

PHYSICAL PROPERTIES: MECHANICAL & THERMAL

	TEST METHOD	SI VALUE	U.S. VALUE	
Density	ASTM D 3574, Test A	7.1 kg/m3	0.44 lb/ft3	
Load Deflection At 25% Compression	ASTM D 3574, Test C	156 N/323 cm2	35 lb/50 in2	
Compression Set At 50% Deflection	ASTM D 3574, Test D	< 40%	< 40%	
Tensile Strength	ASTM D 3574, Test E	> 59 kPa	> 8.5 psi	
Thermal Conductivity (k)	ASTM C 518 at mean temperature of 24°C (75°F)	0.043 W/(m·K)	0.30 (Btu·in)/(hr·ft2 ^{.0} F)	
Continuous Use Temperature	Recommended maximum	200ºC	400⁰F	

THE SOUNDCOAT PROMISE

We have one goal: to enhance the customer experience by providing world-class products manufactured under ISO 9001:2015 and AS9100:2016 standards in one of our modern manufacturing facilities strategically located on each coast.

All materials are tested and qualified in our acoustics and materials testing laboratory to ensure consistent quality and performance.

Soundcoat products are supplied, tested, and produced to your specifications.





PHYSICAL PROPERTIES: FLAMMABILITY & AGING/OUTGASSING

	TEST METHOD	SI VALUE	U.S. VALUE		
Oxygen Index	ASTM D 2863	30%	30%		
Vertical Burn	FAR 25.853(a)	After flame time: 0 seconds Burn length: 46 mm Dripping: None	After flame time: seconds Burn length: 1.8 inches Dripping: None		
Smoke Emission: Ds at 4.0 minutes	FAR 25.853(d)	3	3		
Toxic Gas Generation:	Boeing BSS 7239, flaming mode	CO: 150 ppm HCN: Not detected HF: Not detected HCI: Not detected SO2: Not detected NOx: Not detected	CO: 150 ppm HCN: Not detected HF: Not detected HCI: Not detected SO2: Not detected NOx: Not detected		
Flame Spread Index & Smoke Developed	ASTM E 162 & ASTM E 662	>5&>5	>5&>5		
Dry Oven Aging:	Boeing BMS 8-300, ASTMD 3574, Test D and FAR 25.853(a), after aging at 70°C (158°F) for 7 days in accordance with ASTM D 573	Load deflection change: ± 2% Compression set change: ±4% Volume shrinkage: <2% Vertical Burn - After flame time: 0 seconds Vertical Burn - Burn length: 46 mm Vertical Burn - Dripping: None	Load deflection change: ±2% Compression set change: ±4% Volume shrinkage: <2% Vertical Burn - After flame time: 0 seconds Vertical Burn - Burn length: 1.8 inches Vertical Burn - Dripping: None		
Outgassing	ASTM E 595	TML: < 1.0% CVCM: < 0.1%	TML: < 1.0% CVCM: < 0.1%		

TECHNICAL DATA SHEET



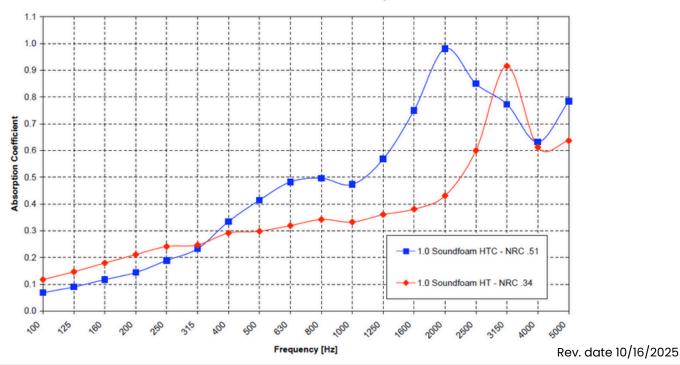


PERFORMANCE: ACOUSTICAL

ACOUSTICAL ABSORPTION COEFFICIENTS FOR CONDITIONED* HT FOAM (metric sabins/m2 or sabins/ft2), ASTM C 423 and E 795, Type A Mounting

Frequency (Hz)	125	250	500	1000	2000	4000	NRC
25 mm (1 inch)	0.15	0.30	0.71	0.94	0.97	0.79	0.75

Normal Incidence Sound Absorption 1.0" Soundfoam HT and HTC Comparison



Visit <u>soundcoat.com</u> to see our complete line of absorption, barrier, damping, sealing, and thermal materials.

For further information on meeting specific requirements and for optimum product configuration, contact our Technical Support Department at 1-800-394-8913.

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Properties subject to change without notice. Check with Soundcoat for latest revisions. Flame, smoke, toxicity performance is not intended to reflect hazards presented by this material under actual fire conditions. The Federal Trade Commission considers that there are no existing test methods or standards regarding flammability that are accurate indicators of the performance of cellular plastic materials under actual fire conditions. Any results of existing test methods are intended for measurements of the relative performance of such materials under specific controlled test conditions.

Kapton®, Nomex® and Tedlar® are registered trade names of Dupont Corporation.