



### 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:
  - 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
<b>Density</b>	ASTM D 3574, Test A	7.1 kg/m <sup>3</sup>	0.44 lb/ft <sup>3</sup>
<b>Load Deflection At 25% Compression</b>	Boeing BMS 8-300	156 N/323 cm <sup>2</sup>	35 lb/50 in <sup>2</sup>
<b>Compression Set At 50% Deflection</b>	ASTM D 3574, Test D	< 40%	< 40%
<b>Flexibility</b>	Boeing BMS 8-300	No creasing or tearing	No creasing or tearing
<b>Tensile Strength</b>	ASTM D 3574, Test E	> 59 kPa	> 8.5 psi
<b>Thermal Conductivity (k)</b>	ASTM C 518 at mean temperature of 24°C (75°F)	0.043 W/(m·K)	0.30 (Btu·in)/(hr·ft <sup>2</sup> ·°F)
<b>Continuous Use Temperature</b>	Recommended maximum	200°C	400°F

### 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
<b>Oxygen Index</b>	ASTM D 2863	30%	30%
<b>Vertical Burn</b>	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
<b>Smoke Emission: Ds at 4.0 minutes</b>	FAR 25.853(d)	3	3
<b>Toxic Gas Generation:</b>	Boeing BSS 7239, flaming mode	CO: 150 ppm HCN: Not detected HF: Not detected HCl: Not detected SO2: Not detected NOx: Not detected	CO: 150 ppm HCN: Not detected HF: Not detected HCl: Not detected SO2: Not detected NOx: Not detected
<b>Flame Spread Index &amp; Smoke Developed</b>	ASTM E 162 & ASTM E 662	> 5 & > 5	> 5 & > 5
<b>Dry Oven Aging:</b>	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
<b>Outgassing</b>	ASTM E 595	TML: < 1.0% CVCM: < 0.1%	TML: < 1.0% CVCM: < 0.1%



**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

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Visit [soundcoat.com](http://soundcoat.com) 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.

*The information contained herein is based on laboratory test data developed by or for Soundcoat and is believed to be reliable, but its accuracy or completeness is not guaranteed. The buyer must test this product to determine its suitability for his/her specific application before use. Only use a Soundcoat product after thoroughly consulting instructions on the data sheet for the specific product. SOUNDCOAT DISCLAIMS ANY RESPONSIBILITY FOR 1) WARRANTIES OF FITNESS AND PURPOSE, 2) VERBAL RECOMMENDATIONS, 3) CONSEQUENTIAL DAMAGES FROM USE, AND 4) VIOLATION OF ANY PATENTS OR TRADEMARKS HELD BY OTHERS.*

*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.