

## AC-530 POLYIMIDE FOAM

TYPICAL TECHNICAL DATA\*
Meets AIMS 04-14-004

PROPERTY	TEST METHOD	SI VALUE	U.S. VALUE
MECHANICAL			
Density	ASTM D 3574, Test A	5.7 kg/m <sup>3</sup>	0.36 lb/ft <sup>3</sup>
Load Deflection At 25% Compression	ASTM D 3574, Test B <sub>1</sub>	70 N/323 cm <sup>2</sup>	16 lb/50 in <sup>2</sup>
Compression Set At 50% Deflection	ASTM D 3574, Test D	< 30%	< 30%
THERMAL			
Thermal Conductivity (k)	ASTM C 518 at mean temperature of 24°C (75°F)	0.047 W/(m·K)	0.33 (BTU⋅in)/(hr⋅ft²⋅°F)
Continuous Use Temperature	Recommended maximum	200°C	400°F
FLAMMABILITY			
Oxygen Index	ASTM D 2863	> 30%	> 30%
Vertical Burn: After flame time Burn length Dripping	FAR §25.853(a), Appendix F, Part I, (a)(1)(i)	0 seconds 56 mm None	0 seconds 2.2 inches None
Smoke Emission: D <sub>s</sub> at 4.0 minutes	FAR §25.853(d), Appendix F, Part V	3	3
Toxic Gas Generation: CO HCN HF HCI SO <sub>2</sub> NO <sub>x</sub>	Boeing BSS 7239, flaming mode	130 ppm Not detected Not detected Not detected Not detected 10 ppm	130 ppm Not detected Not detected Not detected Not detected 10 ppm
AGING			
Humid Aging: Thermal conductivity change 50% CFD retained Weight gain	ASTM C 518 and D 3574, Test C after 1,000 hours at 70°C (158°F) and 95-98% relative humidity	- 2% 80% 0%	- 2% 80% 0%
Dry Oven Aging: Load deflection change Compression set change Volume shrinkage Vertical Burn - After flame time Vertical Burn - Burn length Vertical Burn - Dripping	ASTM D 3574, Tests B <sub>1</sub> , D and FAR §25.853(a), Appendix F, Part I, (a) (1) (i) after aging at 70°C (158°F) for 7 days in accordance with ASTM D573	- 3% + 5% < 2% 0 seconds 51 mm None	- 3% + 5% < 2% 0 seconds 2.0 inches None
ACCOUSTICAL			

## ACOUSTICAL ABSORPTION COEFFICIENTS FOR FLEXED FOAM (metric sabins/m² or sabins/ft²)

ASTM C 423 and E 795, Type A Mounting

Thic	kness	125	250	500	1000	2000	4000	NRC
25 mm	(1 inch)	0.06	0.17	0.52	1.05	1.02	0.93	0.70

\*The above are typical values subject to normal manufacturing variation.

AC530-AIMS-1202

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