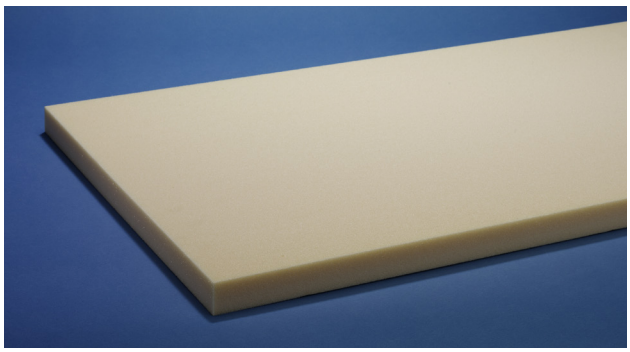

TECHNICAL DATA

Divinycell U

THE HIGH PERFORMANCE SANDWICH CORE

Divinycell U foam is a recyclable, prepreg compatible sandwich core offering excellent Fire, Smoke and Toxicity (FST) properties, good mechanicals, and processing characteristics.

MECHANICAL PROPERTIES DIVINYCELL® U

Property	Test Method	Unit		U60	U80	U110
Compressive Strength	ASTM D 1621	psi	Nominal	102	159	261
			Minimum	80	116	188
Compressive Modulus	ASTM D 1621	psi	Nominal	3045	5075	7975
			Minimum	1885	3045	3335
Tensile Strength	ASTM D 1623	psi	Nominal	305	406	522
			Minimum	261	333	435
Shear Strength	ASTM C 273	psi	Nominal	116	145	232
			Minimum	87	116	188
Shear Modulus	ASTM C 273	psi	Nominal	1885	2320	3335
			Minimum	1595	1885	2610
Density[1]	ASTM D 1622	lb/ft^3	Nominal	3.7	5	6.9

1. Tolerance ±10%

For optimal design of applications used in high operating temperatures in combination with continuous load, please contact Diab Technical Services for detailed design instructions.

PRODUCT CHARACTERISTICS

- Excellent FST properties
- Exceptional OSU heat release performance
- High temperature resistance
- Good chemical resistance
- Hot formable
- Acoustic and thermal insulation
- Fast and easy to process
- No film adhesive required
- No need to edge fill

APPLICATION AREAS

Structures, radomes, and interior components.

Customers
LM
ULA

Specifications
Aero G22084
STM1035

TECHNICAL CHARACTERISTICS DIVINYCELL® U

FIRE, SMOKE & TOXICITY CHARACTERISTICS

Characteristic	Standard	Test Method	U60	U80	U110
Vertical Burn, 60 sec	FAR / CS 25.853 Appendix F	Part I (b)(4)	Pass	Pass	Pass
Heat Release, Peak / Total	FAR / CS 25.853 Appendix F	Part IV	<25 / <20	<25 / <20	<25 / <20
	Airbus ABD 0031	AITM 2.0006			
	Boeing BSS 7322	ASTM E906			
Smoke Density1, Ds4, Ds1.5	FAR / CS 25.853 Appendix F	Part V	<1	2	2
	Airbus ABD 0031	AITM 2.0007			
	Boeing BSS 7238	ASTM E662			
Combustion Toxicity[1]	Airbus ABD 0031	AITM 3.0005	Pass	Pass	Pass
	Boeing BSS 7239	ASTM E662			

1. Flaming mode

ELECTRICAL AND THERMAL CHARACTERISTICS

Characteristic	Standard	Test method	U60	U80	U110
Dissipation Factor	ASTM D 2520	Method A	0.0003	0.0008	0.0003
Dielectric Constant			1.06	1.10	1.13
Thermal Conductivity, W/(m-°K) at 23°C	ASTM C 177	–	0.036	0.038	0.039

TECHNICAL CHARACTERISTICS

Characteristic	Standard	Result
Coefficient of Linear Expansion	ASTM D 696	x10^{-6}/°C
Tg	-	217°C

Maximum temperature is dependent on time, pressure, and process conditions. Therefore, users are advised to contact Diab Technical Services to confirm that Divinycell U is compatible with their processing parameters.

PHYSICAL CHARACTERISTICS

Format		Unit	U60	U80	U110
Plain sheets	Length	inch	96.06	96.06	96.06
	Width	inch	48.03	45.0	41.97

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