Product Information

ROHACELL® A

STRUCTURAL FOAM FOR AIRCRAFT APPLICATIONS

ROHACELL® A is closed-cell rigid foam based on polymethacrylimide (PMI) chemistry that is completely free of CFC's and engineered to meet the demanding requirements of the aerospace industry.

Stringent quality control supported by extensive testing documentation of **ROHACELL® A** has led to specification by major aircraft manufacturers for more than 40 years, including MIL, CMS and others.

PROCESSING AND PRODUCTION

ROHACELL® A foam is suitable for both prepreg processing and vacuum infusion at temperatures up to 130 °C (266 °F) and pressures up to 0.3 MPa (45 psi).

Curing method options include autoclave, vacuum bagged, RTM, VARTM and press.

Using a **ROHACELL®** core makes it possible to produce sandwich components in a single step (co-curing), resulting in reduced overall production time.

WEIGHT SAVINGS

When building composite sandwich components, lightweight **ROHACELL® A** has a closed cell structure that ensures the resin stays exactly where you want it – in the interface. This eliminates excess and unnecessary resin that adds undesirable weight to the finished part.

THERMOFORMING AND SHAPING

ROHACELL® A can be easily thermoformed or CNC machined to meet customer requirements. High precision, pre-shaped and ready-to-use foam cores in complex or simple geometries can also be supplied by the ROHACELL® Shapes Department.

Property	Test Method*	Unit	ROHACELL® 31 A	ROHACELL® 51 A	ROHACELL® 71 A
Density	ISO 845 ASTM D 1622	kg/m³ lbs/ft³	32 2.00	52 3.25	75 4.68
Compressive Strength	ISO 844 ASTM D 1621	MPa psi	0.4 58	0.9 130	1.5 217
Tensile Strength	ISO 527-2 ASTM D 638	MPa psi	1.0 145	1.9 275	2.8 406
Tensile Modulus	ISO 527-2 ASTM D 638	MPa psi	36 5,220	70 10,150	92 13,340
Elongation at Break	ISO 527-2 ASTM D 638	%	3	3	3
Shear Strength	DIN 53294 ASTM C 273	MPa psi	0.4 58	0.8 116	1.3 188
Shear Modulus	DIN 53294 ASTM C 273	MPa psi	13 1,890	19 2,755	29 4,205
Coefficient of Thermal Expansion		1/K*10E-5	3.70	3.33	3.52

Technical data values presented above are typical for nominal density, subject to normal manufacturing variations. *Data values are based on ISO & DIN standard test methods, however ASTM values can be confirmed upon request. All ROHACELL® products are closed-cell rigid foams based on polymethacrylimide (PMI) chemistry and contain no CFC's.

FOR MORE INFORMATION

If you have questions or would like to discuss using **ROHACELL® A** in your application, we encourage you to talk with your local ROHACELL® representative.

Visit www.rohacell.com to locate and directly connect with the contact in your region, by phone or email.

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