

Product Information

ROHACELL® A

Polymethacrylimide Foam, Aircraft Grade

ROHACELL® A is a closed-cell rigid foam based on polymethacrylimide (PMI) chemistry, which does not contain any CFC's.

Thanks to stringent quality control and the availability of the extensive documentation ROHACELL® A meets the requirements of aircraft construction and is mostly used in this application field.

Because of its relatively large pore structure, ROHACELL® A is particularly suitable in aerospace applications for prepreg processing, but vacuum infusion processing can also be used at temperatures up to 130°C (266°F) and pressures up to 0.3 MPa (45 PSI).

The following cure methods are suitable: autoclave, vacuum bagged, RTM, VARTM, press and others. Sandwich components using ROHACELL® A as core material can be realized in a single work step (co-curing).

The thermo-formability of ROHACELL® provides a tremendous manufacturing advantage.

ROHACELL® A is also easy to shape by machining.

For further information, please contact our experts by phone +49 6151 18 1005 or e-mail rohacell@evonik.com.

Properties of ROHACELL® A

Properties	Unit	ROHACELL® 31 A	ROHACELL® 51 A	ROHACELL® 71 A	ROHACELL® 110 A	Standard
Density	kg/m ³	32	52	75	110	ISO 845
	lbs./cu.ft.	2.00	3.25	4.68	6.87	ASTM D 1622
Compressive strength	MPa	0.4	0.9	1.5	3.0	ISO 844
	psi	58	130	217	435	ASTM D 1621
Tensile strength	MPa	1.0	1.9	2.8	3.5	ISO 527-2
	psi	145	275	406	507	ASTM D 638
Shear strength	MPa	0.4	0.8	1.3	2.4	DIN 53294
	psi	58	116	188	348	ASTM C 273
Elastic modulus	MPa	36	70	92	160	ISO 527-2
	psi	5,220	10,150	13,340	23,200	ASTM D 638
Shear modulus	MPa	13	19	29	50	DIN 53294
	psi	1,885	2,755	4,205	7,250	ASTM C 273
Strain at break	%	3	3	3	3	ISO 527-2
						ASTM D 638
Heat distortion temperature	°C	180	180	180	180	DIN 53424
	°F	356	356	356	356	

Technical data of our products are typical values for the nominal density.

® = registered trademark

This information and all technical and other advice are based on Evonik's present knowledge and experience. However, Evonik assumes no liability for such information or advice, including the extent to which such information or advice may relate to third party intellectual property rights. Evonik reserves the right to make any changes to information or advice at any time, without prior or subsequent notice. Evonik disclaims all representations and warranties, whether express or implied, and shall have no liability for, merchantability of the product or its fitness for a particular purpose (even if Evonik is aware of such purpose), or otherwise. Evonik shall not be responsible for consequential, indirect or incidental damages (including loss of profits) of any kind. It is the customer's sole responsibility to arrange for inspection and testing of all products by qualified experts. Reference to trade names used by other companies is neither a recommendation, nor an endorsement of the corresponding product, and does not imply that similar products could not be used.