

## HyboFOAM® W

### Introduction

HyboFOAM® W is a high-grade closed-cell rigid foam based on polymethacrylimide (PMI), which contains no halogen at all. The cell size is middle and uniform.

### Processing and production

HyboFOAM® W can withstand a medium temperature curing process with a maximum temperature of 180 °C and a maximum pressure of 0.7 MPa, depending on the density. Suitable for curing methods such as autoclave, vacuum bag, RTM, VARTM, VARI, HP-RTM, etc.

Due to its excellent surface resin absorption, engineers can find a perfect balance between peel strength and lightweight requirements.

### Application

HyboFOAM® W used in the manufacture of high-grade composite components, such as aircraft, space/launch vehicles, unmanned aerial vehicles, etc..

### Thermoforming and Shaping

To meet different dimension parts and geometry, it is very easy to shape HyboFOAM® W by thermo-shaping, bonding by various adhesive, and common CNC machine.

HYBO can also directly provide high-precision preformed or ready to use foam core materials with complex or simple geometric shapes.

Property	Test Method *	Unit	HyboFOAM® W 52	HyboFOAM® W 75	HyboFOAM® W 110
Density	GB/T 6343 ASTM D1622 ISO 845	kg/m3	52	75	110
		g/cm3	0.052	0.075	0.11
		lb/ft3	3.25	4.68	6.87
Compressive Strength	GB/T 8813 ASTM D1621 ISO 844	MPa	0.8	1.5	3
psi		116	218	435	
Compressive Modulus	ISO 844	MPa	40	55	100
		psi	5800	7975	14500
Tensile Strength	GB/T 1040.2 ASTM D638 ISO 527-2	MPa	1.6	2.4	3
		psi	232	348	435
Tensile Modulus	ISO 527-2	MPa	74	100	150
		psi	10730	14500	21750
Elongation at Break		%	2	2	2
Shear Strength	GB/T 1455 ASTM C273 DIN 53294	MPa	0.8	1.25	2
		psi	116	181	290
Shear Modulus	DIN 53294	MPa	23	35	50
		psi	3335	5075	7250
Heat Deflection Temperature	GB/T 31295 DIN 53424	°C	≥230		

The above values are typical values for nominal density, and the measured values will vary due to manufacturing deviations.

\* Data is based on ASTM standard test methods, but GB or ISO values can be confirmed upon request.

## For More Information

If you have questions or want to discuss the use of **HyboFOAM® W** in your application, we recommend that you communicate with your local contacts.

Please visit [www.hybofoam.com](http://www.hybofoam.com), find and contact the local contact person directly by phone or email.

## Disclaimer

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