

## Production Information

# HyboFOAM® C

### Introduction

**HyboFOAM® C** is a closed-cell rigid foam based on polymethacrylimide (PMI), which contains no halogen at all. The cell size is fine and uniform.

### Processing and production

**HyboFOAM® C** 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

The application of **HyboFOAM® C** is pretty wide. Basically, it is suitable for most of sandwich structure composites parts, including X-Ray/CT tables, sports equipment; vehicle/high speed railway, and floating/fishing kits, etc.

### Thermoforming and Shaping

To meet different dimension parts and geometry, it is very easy to shape **HyboFOAM® C** 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® C 32	HyboFOAM® C 52	HyboFOAM® C 75	HyboFOAM® C 110	HyboFOAM® C 150	HyboFOAM® C 200
Density	GB/T 6343	kg/m <sup>3</sup>	32	52	75	110	150	200
	ASTM D1622	g/cm <sup>3</sup>	0.032	0.052	0.075	0.11	0.15	0.2
	ISO 845	lb/ft <sup>3</sup>	2.00	3.25	4.68	6.87	9.36	12.48
Compressive Strength	GB/T 8813 ASTM D1621	MPa	0.4	1	1.7	3.2	5	9
		psi	58	145	247	464	725	1305
Compressive Modulus	ISO 844	MPa	12	40	75	120	190	300
		psi	1740	5800	10875	17400	27550	43500
Tensile Strength	GB/T 1040.2	MPa	1	1.9	2.8	4.2	5.2	8
		psi	145	276	406	609	754	1160
Tensile Modulus	ASTM D638 ISO 527-2	MPa	35	68	110	150	200	260
		psi	5075	9860	15950	21750	29000	37700
Elongation at Break		%	3.5	3.5	3.5	3.5	3.3	3.3
Shear Strength	GB/T 1455 ASTM G273	MPa	0.4	0.8	1.3	2.4	3.3	4.6
		psi	58	116	189	348	479	664
Shear Modulus	DIN 53294	MPa	12	20	35	50	75	100
		psi	1740	2900	5075	7250	10875	14544
Heat Deflection Temperature	GB/T 31295 DIN 53424	°C	≥180					/

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® C** 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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