

Production Information

HyboCORE® SK

Introduction

HyboCORE® SK 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

HyboCORE® SK can withstand a medium temperature curing process with a maximum temperature of 150 °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.

The cost of HyboCORE® SK is very advantageous, and it is at the same level as the PVC foam core material. Without affecting material costs, customers can adopt higher curing temperatures and faster curing speeds to reduce process and manufacturing cost.

Application

The application of HyboCORE® SK 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 HyboCORE® SK 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	HyboCORE® SK 60	HyboCORE® SK 80	HyboCORE® SK 110	HyboCORE® SK 150
Density	GB/T 6343	kg/m ³	60	80	110	150
	ASTM D1622	g/cm ³	0.06	0.08	0.11	0.15
	ISO 845	lb/ft ³	3.75	4.99	6.87	9.36
Compressive Strength	GB/T 8810 ASTM D1621	MPa psi	1.2 174	2 290	3.5 508	5 725
Compressive Modulus	ISO 844	MPa psi	50 7250	75 10875	130 18850	200 29000
Tensile Strength	GB/T 1040.2 ASTM D638 ISO 527-2	MPa psi	2.1 305	3.1 450	4.5 653	5.2 754
Tensile Modulus		MPa psi	70 10150	100 14500	140 20300	200 29000
Elongation at Break		%	6	6	6	6
Shear Strength	GB/T 1455 ASTM C273	MPa psi	1 145	1.6 232	2.5 363	3.4 493
Shear Modulus	DIN 53294	MPa psi	26 3770	40 5800	60 8700	80 11600
Heat Deflection Temperature	GB/T 31295 DIN 53424	°C	≥165			≥160

For More Information

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

Please visit www.hybofoam.com, find and contact the local contact person directly by phone or email.

Disclaimer

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