

BIOFIBIX product portfolio

BIOFIBIX Hypermat



Fabric Weight

Available in 300, 450 & 600 g/m²



Lightweight

High stiffness to weight ratio for lightweight products.



Low Resin Uptake

10 – 40 % reduction in resin uptake at full impregnation compared to typical flax reinforcements



Fabric Width

Available in 50 – 2540 mm, standard width: 1270 mm



Vibration Damping

2 – 3 times better vibration damping compared to glass- and carbon fiber composites.



Low Moisture Uptake

20 % reduction in moisture uptake compared to typical flax reinforcements

Product portfolio

Hypermat	This is our flagship product and the first reinforcement solution in the field of high-performance flax non-wovens. It features low resin uptake and a smooth surface, which promotes uniform resin distribution and delivers a high-quality finish. In a vacuum infusion process using epoxy resin, the material achieves a fiber mass fraction of 40–45% and provides a stiffness of approximately 9 GPa in all load directions.
Hypermat Shape	As the name suggests, this variant is more flexible and easier to form. The resin uptake is slightly higher. In a vacuum infusion process using epoxy resin, the material achieves a fiber mass fraction of 30–35% and provides a stiffness of approximately 7.5 GPa in all load directions.
Hypermat spaced fabric	With our partners, BIOFIBIX can supply a spaced fabric. This reinforcement features a built-in core layer that structurally separates the outer layers of Hypermat. These products are typically used in closed mould processes, offering easy impregnation, good conformability, and an optimized positioning of the reinforcement layers.
Hypermat laminates	With our partners, BIOFIBIX can supply laminates in sheets or coils. These are typically used for sandwich panel construction in the caravan, truck, and marine industries.
Hypermat preforms	The unique surface treatment enables the production of dry preforms that are dimensionally stable. The non-woven fiber architecture is well-suited for complex shapes. Hypermat sheets can be pressed into the desired geometry at high production speed. The resulting dry preform is then typically used in a high-volume RTM process.

Hypermat slitted tapes (for pultrusion)	For pultrusion, Hypermat can also be supplied in 50–600 mm tapes. Typically, Hypermat (original) is used in these applications, as it has high tear strength and low resin absorption, which helps pull the material smoothly through the pultrusion process. Hypermat provides performance in off-axis directions, delivers an excellent surface finish, and offers a natural appearance.
Hypermat Colour	Coloured variants are available on demand
Hypermat kits	Hypermat can be supplied as “kits,” consisting of sheets cut into any required shape to improve production efficiency and facilitate draping.

Notes

Flax and glass are two very different materials. You should never replace a composite made with 600 g/m² glass with 600 g/m² flax. The composite made with flax will be too thick and too strong.

Rules of thumb:

- Hypermat 325 g/m² replaces a 550-600 g/m² glass mat
- Hypermat 450 g/m² replaces an 750-800 g/m² glass mat

Due to its unique surface treatment and innovative manufacturing process, BIOFIBIX Hypermat can also compete with woven and stitched fabrics made from either flax or glass fibers

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