



Si-X PRE

A new generation
universal prepreg for PCM

April 2026





Si-X PRE

About the Product

Si-X PRE is an innovative solution for **PCM technology**.

Based on our patented **Si-X BINDER** binding agent, **Si-X PRE** is an intermediate product for a wide range of industrial applications.

It makes all goods and items produced with PCM technology **fire-retardant** and **ecological**.





Si-X PRE

Properties

Si-X PRE is made using hemp fibers bonded with our non-organic fire-retardant adhesive, **Si-X BINDER**, giving **Si-X PRE** products a unique set of properties:

- © High **mechanical strength**
- © **Fire-retardant** – B, s1, d0.
The products of combustion are **non-hazardous** (toxicity class T1)
- © High **sound and vibration absorption**





Si-X PRE

Applications

Si-X BINDER exhibits **quasi-thermoplastic properties** that are unusual for inorganic materials. As a result, the **Si-X PRE** prepreg is ideally suited for the production of elements using hot-pressing methods, particularly for the standard industrial **PCM (prepreg compression molding)** process.



Si-X MUTE acoustic panel formed from **Si-X PRE** prepreg



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Applications

Thanks to its properties, the **Si-X PRE** prepreg can be effectively used in the production of various materials and components. Specifically:

- © **Fire-retardant acoustic panels** with a textured surface: **Si-X MUTE**
- © **Fire-retardant interior components** for the **automotive industry** (doors, ceilings, dashboards, etc.)
- © **Fire-retardant furniture and interior panels** (MDF or particleboard, laminated with HPL)
- © **Si-X FRAME** Structural load-bearing elements (columns, beams) for frame buildings
- © **Si-X HEMPBOARD** facade panels with a negative carbon footprint – a replacement for fiber cement / cement-bonded particleboard panels





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Sustainability

Si-X PRE is an innovative product designed with sustainability in mind:

- © **Si-X PRE** has a **negative carbon footprint**
- © **Si-X PRE** is made from **natural (plant-based) raw materials**
- © **Si-X PRE** and products made from it are **100% recyclable** and biodegradable





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Sustainability

Si-X PRE is an innovative product designed with sustainability in mind:

- © **Si-X PRE** adheres to the principles of the **circular economy (closed loop)**. Waste from its production and processing is returned to the production cycle without generating solid waste.
- © The production of **Si-X PRE** products does not release harmful or hazardous substances into the atmosphere; only water vapor is emitted.
- © Interior elements made from **Si-X PRE** (acoustic panels, etc.) regulate indoor humidity and create a healthy indoor climate.





Additional Options

Si-X PRE is available with or without an **additional decorative layer**.

It can be applied/bonded to the prepreg immediately prior to manufacturing the products.

For this purpose, **Si-X BINDER** adhesive can be supplied together with **Si-X PRE**. Any textile, felt, natural or synthetic leather, etc., can be used as the decorative layer.



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Additional Options

Si-X PRE is supplied in rolls up to 1.5 m wide, vacuum-packed.

In this packaging, **Si-X PRE** can be **stored for several years** without losing its properties.



Si-X PRE and its manufacturing technology are **protected by patent** EP 4 165 145 B1.



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