



# GREENPOXY® BIO-BASED SYSTEMS

SUSTAINABLE MATERIALS WITH UNCOMPROMISING PERFORMANCE

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It's all in the Chemistry

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With the world continuing to need products that are less harmful to the environment, Sicomin believes strongly in the development of sustainable composite materials and continues to invest considerable resource and expertise into developing new, bio-based systems derived from renewable resources.

Sicomin's GreenPoxy® range, developed and manufactured in France, offers the largest range of next generation bio-based epoxy resin systems on the market today, some produced with up to 51% of bio-carbon content deriving from plant and vegetable origin (ASTM D6866).

Matching the performance of non-bio systems, GreenPoxy® has created a wide following and is now used in a variety of markets such as marine structures, water and winter board sports, construction, automotive and electric vehicles. With its recently expanded manufacturing capability, Sicomin can provide commercial scale capacity for the largest of industrial applications with no performance compromised.





## GREENPOXY® 28



A bio-based epoxy resin aimed specifically at HP-RTM processing techniques.

- Up to 28% bio-based carbon content\*.
- Fast cycle, low toxicity, third generation bio-based formulation.
- Can be used for both high performance structural parts and aesthetic carbon fibre components.
- Optimised for fast production cycle times and superior mechanical performance.
- Available in industrial quantities typically required by Automotive OEM's.

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“Sicommin’s GreenPoxy® technology delivers supreme mechanical performance whilst enabling sustainable manufacturing practices.”  
ZAG



VIEW  
GREENPOXY® 28  
DATASHEET



## SGI 128



VIEW  
SGI 128  
DATASHEET



A bio friendly intumescent gelcoat.

- Up to 38% bio-based carbon content.
- Exceptional fire performance.
- Halogen free with low smoke toxicity.
- Hardwearing weatherproofed finish for exterior applications.
- Available in industrial volumes with short lead times.
- Tested to EN 13501 (EUROCLASS B-S1-d0) and ASTM E84 (Class A).

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Available in industrial  
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## INFUGREEN 810



A bio solution for Infusion

- Up to 38% bio-based carbon content.
- Very low viscosity clear system for infusion of small to very large parts, including very thick laminates.
- Room temperature infusion system.
- Choice of hardeners to adjust cure times.

**CASE STUDY**

**Sicomin**  
Epoxy Systems

**SICOMIN'S GREENPOXY® BIO-BASED RESINS – SUSTAINABLE MATERIALS WITH UNCOMPROMISING PERFORMANCE FOR THE GREENBOATS® FLAX 27**

GREENBOATS® has been producing innovative natural fibre composites at their Bremen facility for more than a decade, expertly crafting a range of marine and industrial products with a mission to use 100% renewable and sustainable raw materials in sandwich composite structures.

Sicomin has partnered with GREENBOATS® since the very beginning, with TMC O&T Composites – Sicomin's German distributor – supplying materials and technical support as hardener and resin infusion production processes have been optimised for natural fibre composites.

The FLAX 27, an 8.2m classically styled daycruiser designed by renowned naval architect Sabotelli & Co is the most complex, no compromise, natural fibre composite project realised by GREENBOATS® to date. The hull, deck and internal structure of the vessel were infused with Sicomin's new GreenPoxy Infugreen 810 resin and Res Flow reinforcement fabric.

Vacuum infusion with Sicomin's Infugreen 810 produced crystal clear natural fibre laminates with outstanding mechanical properties, whilst the closed mould process also improved wetting conditions in the factory. Available with a choice of hardeners to adjust the curing time as required, Infugreen 810

**GreenPoxy®** **DNV-GL**

**READ CASE STUDY**



**VIEW  
INFUGREEN 810  
DATASHEET**



## GREENPOXY® 33



A bio solution for compression moulding.

- Up to 35% bio-based carbon content.
- A high-performance bio epoxy resin.
- Fast curing, clear laminate.
- High mechanical properties.
- Excellent wetting out properties resulting in a low resin consumption.

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**CASE STUDY**

**Sicomin**  
Epoxy Systems

**SONNTAG FINS CONFIRM GREENPOXY® 33 AS BEST SOLUTION FOR CUSTOM CARBON WINDSURF FINS**

Sicomin's latest marine collaboration sees its industry leading GreenPoxy® bio-based epoxy resin used for custom carbon fibre windsurf fins, combining speed, fatigue performance and sustainability for some of the fastest sailors alive.

Being Sonntag owner and founder of Sonntag Fins, he has been involved with windsurfing since the 80s. He decided to launch the company's custom carbon fibre windsurf fins around 12 years ago. Sonntag's latest composite materials, new research results, CNC machined wings and resin materials, all the ingredients for a package for innovation, design, calculation and testing, making them the ultimate in performance and consistency.

Targeted at windsurf sailboats, racers and speed sailors, these Sonntag fins are custom made products, tailored specifically to the user based on a discussion about their sailing style, fin shape, size and weight as well as how they like to feel the fin while sailing.

All of this attention to detail and template manufacturing places a high importance on the performance and consistency of the raw materials used in each fin. This motivated him to be satisfied with our composite, but also on the best way to feel the fin and on the water by the team riders.

With this in mind, being started to work with Time Out Composite, Sonntag's current distributor, when the company was looking for a new resin system that could reduce costs, time and resin manufacturing issues. The final system was discussed at this time, but the final product came to Sonntag via Sicomin (2020).

In 2020, Sonntag and Time Out Composite involved the help of some sustainable resin manufacturers. To save the perfect time for Sonntag Fins, with their unique bright green 33 resin, they had to go green on the inside too with Sicomin's GreenPoxy® 33 resin.

Test fins were produced with the new material performing well in production tests. The new resins were also tested and passed at 140°C, with the new GreenPoxy® 33 resin showing significant higher elongation at maximum modulus, meaning the cured resin was more tough and resistant to damage. Most a customer's request is met. With mechanical properties

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**VIEW  
GREENPOXY® 33  
DATASHEET**





## SURF CLEAR EVO



VIEW  
SURF CLEAR EVO  
DATASHEET

A bio solution for hand laminating and coating

- Up to 37% bio-based carbon content.
- Provides the highest UV resistance of all the Sicomin clear resins.
- Specifically developed for the construction of surf and windsurf boards.
- High gloss appearance for transparent laminates, clear carbon parts, wooden components, and decorative goods.
- Self-levelling, sandable and scratch resistant.

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## GREENPOXY® 56



VIEW  
GREENPOXY® 56  
DATASHEET

Multipurpose bio solution.

- Up to 51% bio-based carbon content.
- Achieves tough and hard wearing gloss laminates.
- Suitable for laminating, injection moulding, filament winding, press processes and casting.
- Guaranteed supply in industrial tonnages.

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### KETOS ALL CARBON EPOXY KITE FOILS AND BOARDS WITH SICOMIN EPOXY SOLUTIONS

Sicomin has been supplying the marine industry's innovators and pioneers for more than 30 years, manufacturing high performance epoxy resins, adhesives and coating systems for stronger, lighter and faster marine craft around the world. As the development of Kites - where a board is fastened to the water supported by hydrofoil - continues, Sicomin work alongside some of the sport's most innovative artisans, providing the composite strength within these spectacular flying machines.

Kites - based in Ales, France near the beautiful Lake Bourget - is the foil board developed by the team behind SIC Composites, who have been manufacturing advanced composite components for leading sporting brands such as Salomon, Roeline, Maui and Sup'Air for more than 30 years. Sicomin has supplied composite materials to SIC since 1990, making them the number one choice when the company started to develop foils for windsurfing in 2008.

The Kites range of foilboard boards and foil is an entirely in-house creation, with conception, design, engineering, prototyping, manufacturing, marketing and distribution all managed by the Kites team. Focused on performance but also on making the sport accessible to new riders, Kites foil packages can be tailored to match the user's ability and preference for speed, ease of handling, sailing.

Kites foil sets are made up of 4 carbon fibre components - the vertical mast separates the board and the foilage which has different profile front and rear wing attached. A key part of the Kites concept is that parts should be interchangeable, making easy for clients to change foil for different conditions, upgrade components as their skill levels increase or replace a damaged part while it is

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Innovative formulations  
match the performance  
of non-bio systems.







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## PB 360 GS



VIEW  
PB 360 GS  
DATASHEET

New bio-foaming epoxy.

- Up to 37% bio-based carbon content.
- Allows 'in situ' production of a shaped low-density epoxy foam core.
- Two-part system.
- Offers good adhesion to a variety of materials and low water absorption.
- Particularly suited to foam cored components with lightweight glass, carbon or natural fibre laminates.



READ CASE STUDY

“Our goal is to really get people excited about Natural Fibre Composites. Sicomin’s GreenPox<sup>®</sup> products help us create sustainable composites with no compromise in performance or appearance.”  
GREENBOATS<sup>®</sup>

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## GREENCAST 160

River table cosmetic casting

- High clarity, UV resistant epoxy system
- 40% bio-based carbon content
- Low reactivity for thick casting pours



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