

Stellium® / Magic Glow

High performance & Aesthetic Eco-sourced Material



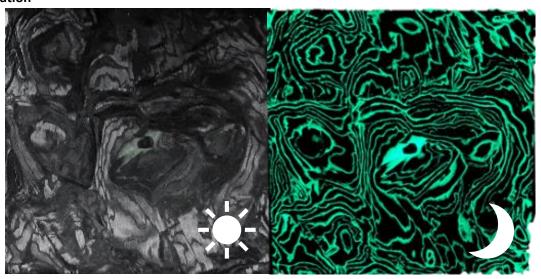
Description

Lavoisier Composites develops solutions to recover post-production composite by-products while maximizing the retention of original properties.

Stellium® is **100**% made of selected **Carbon Fiber** Uni-Directional prepreg material (UD) sourced from the aerospace supply-chain.

The combination of discontinuous continuous UD plies with phosphorescent particles of various characteristics leads to a singular material revealing its specificity at night or under violet lights. The available color spectrum covers a variety of light tones (also available in Super Lumi Nova).

Illustration



Overall Features

- 100% eco-sourced
- Based on discontinuous carbon fibers
- Adapted for extended skin contact
- Easily machinable to obtain desired geometry and surface aspect for small productions
- Stable and UV resistant components
- Water resistant material
- Displays a soberly technical side in broad daylight, while revealing a deeper identity in the dark
- Exhibiting quasi-isotropic properties of very good level

Machining parameters

Stellium® is a hard stratified composite material formulated to withstand at least 120°C service temperature. The high carbon fiber content requires adopting special machining parameters.

Life Cycle Assessment (LCA)

No specific LCA has been made on the various variants of Stellium® product range.

Based on a zero initial impact, as this material is recovered from a first cycle, and knowing the standard manufacturing process, it's possible to assess that Carbonium® reduces the emission of CO2 up to 20 kg for each kg used compared to a virgin-based material.



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Mechanical properties

A dedicated mechanical characterization is still to be made on each product variant of Stellium[®]. Generic information about Stellium [®] is provided in the table below based on common data available.

Properties	Values
Tensile strength (MPa)	280
Young modulus (GPa)	40
Density (g/cm³)	1,6

Recommendation

For any specific request, do not hesitate to contact us by e-mail at bonjour@lavoisier-composites.com Alternatively, you can reach us via the contact page of our website: https://www.lavoisier-composites.com/en/contact-page/

Disclaimer

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