

## Reduce your Product Carbon Footprint. Filter media with eco-friendly lignin saturation at the same performance.

Our well-known performance in fuel, oil and engine air is now available with an eco-friendly lignin-based saturation.

Our lignin filter media is designed to reduce your product carbon footprint. Unlike traditional filter media, our cellulose filter media is saturated with an eco-friendly lignin-based resin, ensuring that your filter element offers best performance, while taking a step into more sustainable filtration solutions.

Lignin is a natural polymer found in the cell walls of plants, providing structural support and rigidity. In our filter media we use lignin for its sustainable properties, offering an ecofriendly alternative to replace fossil-based resins.

The lignin-based resin saturation is used in various automotive applications, including engine air intake, oil, and fuel filtration. The application of lignin is not limited to these - any cellulose filter media, which is currently using phenolic resins can seamlessly be switched to our lignin based saturation.

## Adding sustainability with no loss of performance

By adding the eco-friendly lignin saturation we developed a more sustainable product that does not compromise on filtration performance nor on its mechanical properties. Additionally, the formaldehyde emissions during the curing process are decreased.

Our new lignin saturation can be enhanced with flame retardancy, combining safety and sustainability while meeting the most stringent industry standards. With more than 35 years of experience in flame retardence we are now able to provide a sustainable and safe solution for market demands.

## **OUR BENEFITS**

- · Reduction of product carbon footprint
- Very low formadlyhde emission during curing process
- State of the art physical properties & highest filtration perfomance
- Flame retardant saturation optional
- · Lignin as resin for any cellulose media

## Reduced PCF with eco-friendly resin solution

Compared to standard media with a fossil-based resin saturation initial calculations show that the new lignin-based saturation filter media offers an improved product carbon footprint.

Taking an engine air filter media with flame redardent saturation as an example, the product carbon foot print can be reduced by up to 6,6% with the lignin-based saturation.<sup>1</sup>

The crude oil, that is saved by using a lignin modified resin can be up to 100 kg per one ton of filter material.

<sup>1</sup> Product carbon footprint estimate, cradle-to-gate using primary and secondary data from Sphera MLC 2024