

A horizontal band across the middle of the slide features a microscopic view of cellulose fibers. The fibers are shown in various shades of green and blue, with some appearing as a dense, woven mesh and others as individual, elongated strands. The background of the slide is a light blue with white, curved, overlapping bands that create a sense of depth and movement.

PureCell – Natural fiber-reinforced composites based on pure cellulose

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Impact of Fiber-Reinforced Composites

- Largely feedstocks (fibers and matrices) based on petroleum
- Raw material prices correlate with crude oil price
- Expensive products
- Post-treatments of fiber surface necessary for improved adhesion between fiber and matrix → time consuming + additional costs
- End-of-Life waste: mostly no possibility of a complete recycling



Advantages of PureCell

- HighPerCell® technology enables the environmentally friendly use of cellulose as matrix polymer for the first time
- Reinforcing fibers & matrix based on **pure** cellulose
 - made from 100% **renewable** raw material
 - **all-cellulose based**, therefore **recyclable** and **biodegradable**
 - perfect fiber-matrix adhesion
 - no microplastic!



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Application Areas of PureCell

Automotive interior trim, such as door panels, glove boxes, dashboards, parcel shelves,...



Further fields of application are imaginable, such as

- Interior design: furniture construction
- Sports, leisure and lifestyle products: cell phone covers, planters, surfboards, hard cases
- Construction industry: facade panels, wood construction



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Thank you for your attention!

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