

Development of biodegradable textile coatings

Problem / Motivation

- Growing demand for biobased and biodegradable functional textiles
- Necessary durability of functionality requires chemical cross-linking of the coating matrix – however, the use of currently available cross-linking agents leads to a loss of biodegradability of biodegradable coating matrices
- Identification of suitable formulations and further development of biodegradable binder systems required
- The aim is to analyse the effect of cross-linking and further additives on the performance and biodegradability of a biopolymer-based textile coating

Solution

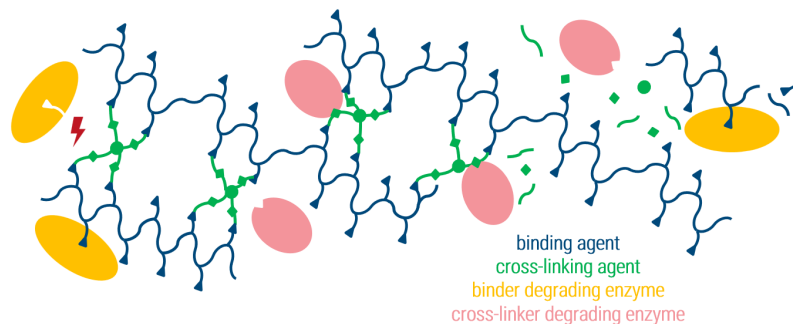
- Selection, production and modification of biodegradable cross-linking agents and development of formulations for textile coating
- Coating of biodegradable textile substrates and evaluation of application conditions
- Testing the coating for complete biodegradability
- Testing and evaluating the functionality of the coated textiles
- Assessment of performance compared to conventional coatings

Project Launch

10/2024

Project Partner

currently none,
open for enquiries



Scheme of the enzymatic degradation of cross-linked, biodegradable binder systems

Acknowledgement

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