

UV-curable foam coatings for Technical Textiles

Problem / Motivation

- Energy saving, ecological and sustainable processes are the trend in the textile industry
- Use of UV-curable aqueous formulations as foam coatings for technical textiles meets these criteria
- Application in the form of unstable/metastable foams as a resource-efficient minimum application process
- Application as stabilising foam for resilient coatings and compacted stabilising foam as microporous coating

Solution

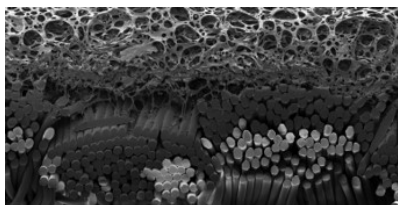
- Formulation development for unstable/metastable and stable foams
- Formulations applied as foam on various textiles by means of knife coating followed by energy efficient thermal drying and UV curing using UV LED lamps
- Compaction tests in order to generate microporous structures
- Evaluation of potential fields of application

Project Launch

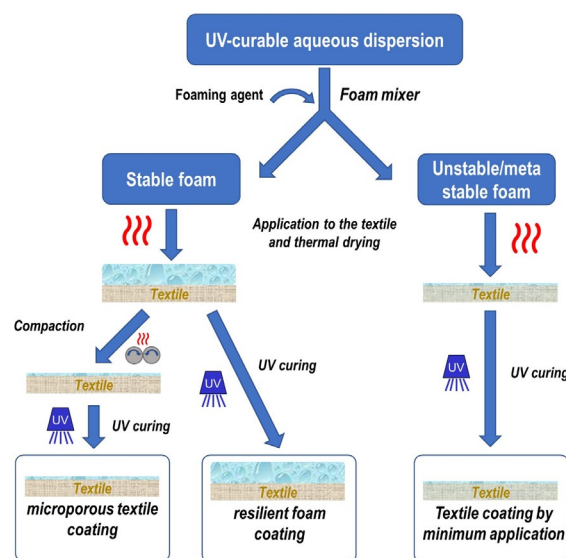
05/2024

Project Partner

currently none,
open for enquiries



SEM image: foam coating



Overview on the approach in the research project

INNO-KOM

Supported by:



on the basis of a decision
by the German Bundestag

Acknowledgement

We would like to thank the Federal Ministry for Economic Affairs and Climate Action for funding the research project UV-curable foam coatings for technical textiles (Reg.-Nr. 49VF230030) within the funding programme "FuE-Förderung gemeinnütziger externer Industrieforschungseinrichtungen – Innovationskompetenz (INNO-KOM) – Vorlauftforschung (VF)".