

Antimicrobial modification of polymers for industrial applications

The competence centre ALTERBIO

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Point of Interest

R&D and proposed commercialization of:

- Innovative antimicrobial systems;
- Systems with strongly bonded antimicrobial substances to eliminate their release into the environment;
- Long-term antimicrobial protection of treated materials without negative health and environmental impact.

Plastics and coatings

Cosmetics

Textile

Main Activities

- Synthesis of antimicrobial substances;
- Incorporation of antimicrobial substances into polymer matrices;
- Preparation of polymer masterbatches;
- Applications in plastics and surface varnishes;
- Antimicrobial compounds for cosmetic applications;
- Applications in textiles;
- Evaluation of health safety and antimicrobial efficacy.



Fig. 1 Antimicrobial PP masterbatch and the product made from this masterbatch

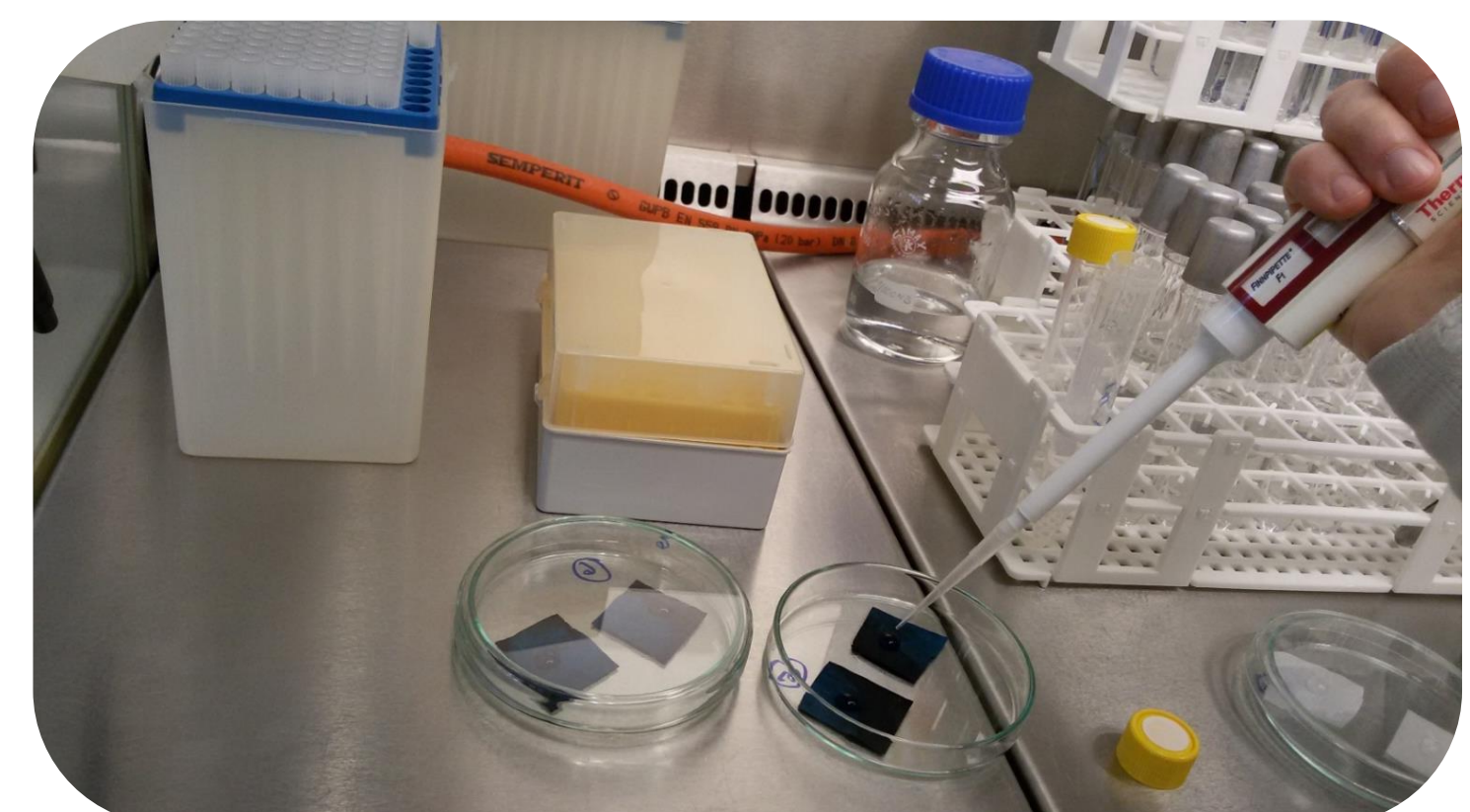


Fig. 3 Antimicrobial testing based on ISO 22196:2011

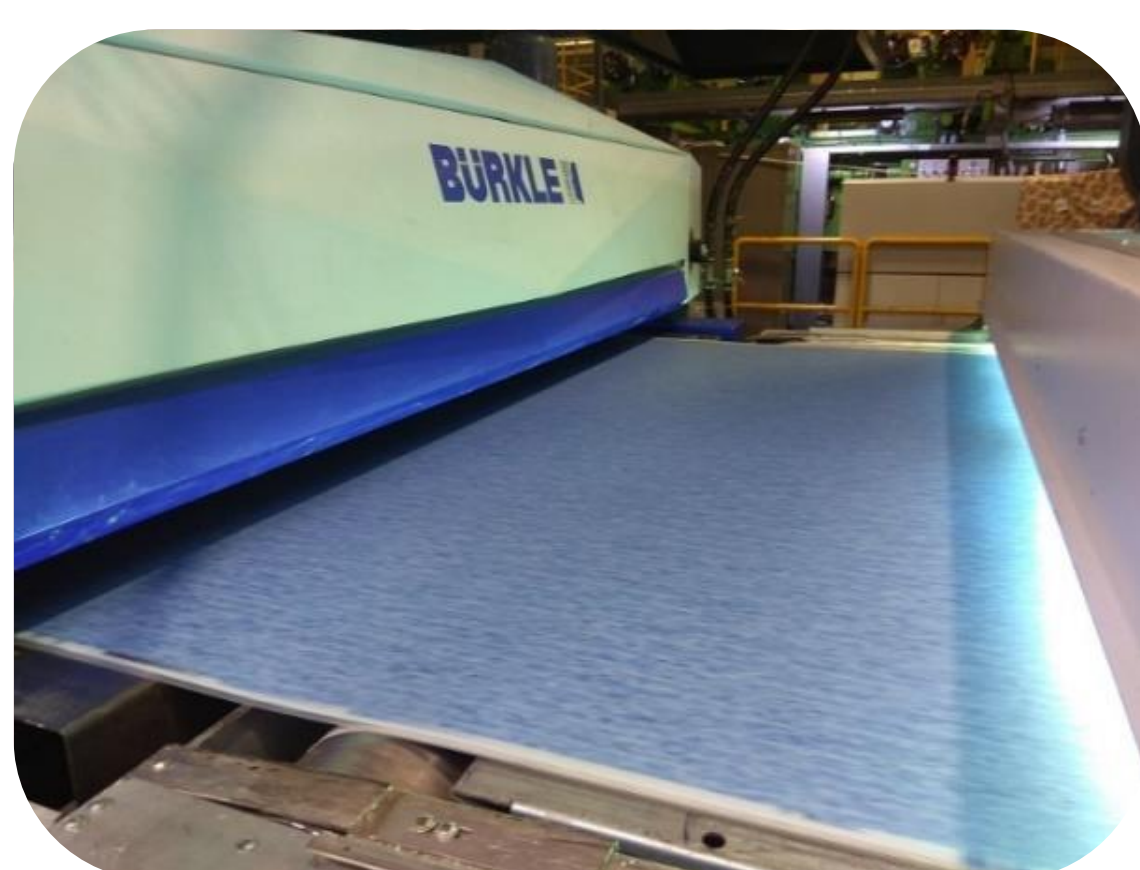


Fig. 2 Varnish application on PVC flooring surface

Research Team

