

TESTING THE ANTIADHESIVE PROPERTIES OF TEXTILE COATINGS^{*}

Textile hygiene is an important part of general hygiene measures in the hospital field, in the public and domestic area. An insufficient textile hygiene can lead to undesired problems like a health-risk or odour formation. Antiadhesive coatings can bring a benefit, without having the disadvantages of certain antimicrobial textile coatings as the release of harmful substances. The INT-Assay is able to measure the antiadhesive properties of textiles and is now available as test service.



Antiadhesive action – INT-Assay

The INT-Assay assesses the primary adhesion of Staphylococcus aureus on textiles as well as removability of bacterial cells during washing. Antiadhesive action is measures via the metabolic activity of the attached bacteria on the textiles.

Antiadhesive action – results

An antiadhesive action is expressed as % of bacterial adhesion in comparison to an uncoated reference textile. The coated sample Tex19 shows a good antiadhesive action with only 37 % bacterial adhesion in comparison to the uncoated reference textile (100%) whereas the coated sample Tex05 showed no antiadhesive action.



Bacterial adhesion on textile samples



Literature

Stiefel, P., et al. (2016). Nature, Scientific Reports | 6:39635 | DOI: 10.1038/srep39635

