

Antimicrobial fibres, fabrics and apparel: innovative weapons against infection

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Abstracts

The demand for antimicrobial fibres, fabrics and apparel has increased sharply since the mid-1990s due to growing awareness among consumers of the importance of personal hygiene and the health risks posed by certain microorganisms. As a result, there is a new generation of antimicrobial products on the market which offer protection against a broad spectrum of bacteria and can withstand up to 100 launderings. However, the increase in usage of such products has caused concern among environmental groups who claim that some antimicrobial agents -- notably silver nanoparticles and triclosan -- are toxic and should be banned from use in consumer products. Amid these concerns, researchers and scientists are stepping up their efforts to develop effective and durable antimicrobial products which are less likely to be harmful to human health and the environment. This report provides a wealth of information, insight and analysis on: the market for antimicrobial fibres, fabrics and apparel; microorganisms and their effects; techniques for preventing the proliferation of microorganisms in apparel; antimicrobials for textile and apparel applications; and methods of imparting antimicrobial properties to fabrics. It also includes information on antimicrobial efficacy testing and regulations, and safety and environmental issues associated with antimicrobial agents. Furthermore, the report provides insight into the applications of antimicrobial agents in apparel, recent developments in antimicrobial treatments, key producers of antimicrobial agents and treatments, and key producers of antimicrobial fibres and fabrics, as well as an outlook for the future.

Contents

SUMMARY

INTRODUCTION

MARKETS FOR ANTIMICROBIAL FIBRES AND FABRICS

MICROORGANISMS AND THEIR EFFECTS

Effects of microorganisms on fabrics

Effects of microorganisms on humans

TECHNIQUES FOR PREVENTING THE PROLIFERATION OF

MICROORGANISMS IN APPAREL

Laundering

Choosing appropriate fabrics

Incorporating antimicrobial agents

TYPES OF ANTIMICROBIAL AGENTS FOR TEXTILE AND APPAREL

APPLICATIONS

Organic antimicrobial agents

Triclosan

Polyhexamethylene biguanide (PHMB)

Quaternary ammonium compounds

Inorganic antimicrobial agents

Metals

Natural antimicrobial compounds

Chitosan

Plant extracts

METHODS OF IMPARTING ANTIMICROBIAL PROPERTIES TO

FABRICS

ANTIMICROBIAL EFFICACY TESTING AND REGULATIONS

Efficacy testing

Regulations

SAFETY AND ENVIRONMENTAL ISSUES ASSOCIATED WITH

ANTIMICROBIAL AGENTS

APPLICATIONS OF ANTIMICROBIAL AGENTS IN APPAREL

Consumer apparel

Medical garments

Protective apparel for food and beverage processing

KEY ANTIMICROBIAL AGENTS AND TREATMENTS AND THEIR

PRODUCERS

Allied Feather & Down: Allied Refined down

Cupron: Cupron Enhanced

Dow Chemical Company: Silvadur

HaloSource: HaloShield

HeiQ Materials: Pure

Lonza: Purista

Microban International: Microban

Milliken: AlphaSan

Polygiene: Polygiene

Quick-Med Technologies: Stay Fresh

Sanitized: Sanitized

Sciessent: Agion Active

Thomson Research Associates: Silpure

KEY ANTIMICROBIAL FIBRES AND FABRICS AND THEIR

PRODUCERS

Nylstar: Meryl Skinlife

NanoHorizons: SmartSilver
Noble Biomaterials: X-static
PurThread Technologies: Sabiya
Rhovyl: Rhovyl'As
Thai Acrylic Fibre: Amicor
Trevira: Trevira Bioactive
Vestagen Technical Textiles: Vestex

OUTLOOK

List Of Tables

LIST OF TABLES

Table 1: Advantages and disadvantages of commonly used antimicrobial agents and technologies

Table 2: Methods commonly used to test activity of antimicrobial fabrics

Table 3: Silver concentrations in washed and unwashed garments

Table 4: Antimicrobial efficacy of Cupron Enhanced after 50 industrial washes

List Of Figures

LIST OF FIGURES

Figure 1: Effects of weak and strong antimicrobial agents

Figure 2: Microscopic image of a textile fibre to which silver nanoparticles have been attached

Figure 3: Antibacterial efficacy of X-static

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