

Selfcleaning Washable Cotton Textiles and its Blendings

Field of use
Chemical industry
Textile industry

**Current state
of technology**
Prototype developed
and tested

Intellectual property
patent number: EP2990527

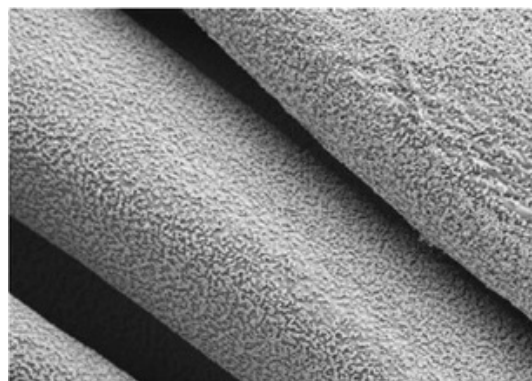
Developed by
University of Ljubljana,
Faculty of Natural Sciences
and Engineering and
National Institute of
Chemistry

Reference
821-35/2016

Contact

Knowledge Transfer Office,
University of Ljubljana

Simona Rataj
Phone: + 386 70 538283
E-mail: gospodarstvo@uni-lj.si



Background

Cotton is the most widely used fabric, mostly because of its good characteristics: nice to the touch, breathability, hydrophilic character, aesthetic looks, natural source. We are able to add some more characteristics to cotton: superhydrophobic and oleophobic effect while preserving breathability. Our cotton becomes a product with superpowers – we are introducing waterproof cotton, resistant to oil stains.

Description of the Invention

The invention relates to the preparation of breathable superhydrophobic and oleophobic coating for cotton and cotton-polyester textiles that has inclined angle lower than 10° even after 10 washings. This is achieved with preparation of micro and nano roughness and adding extra hydrofobic and oleofobic organic silan precursors.

Main Advantages

- Natural textile with additional characteristics: hydrofobic and oleofobic
- Washable