



## Technology Offer

# Selfcleaning Washable Cotton Textiles and its Blendings

### Field of use

Chemical industry  
Textile industry

### Current state of technology

Prototype developed and tested

### Patent status

Patent number EP2990527

### Developed by

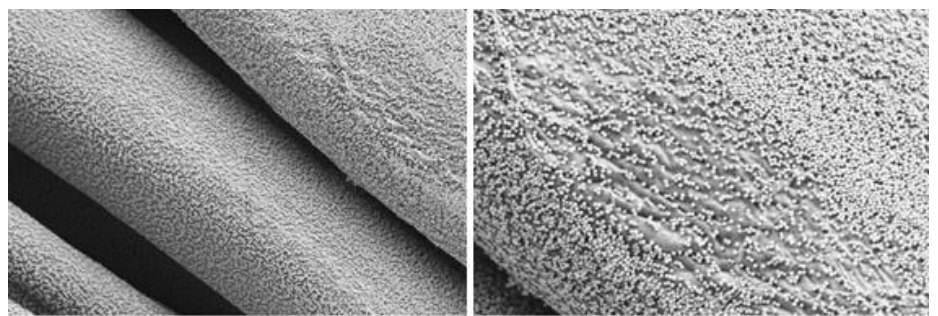
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### Reference

UL20141555006

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### 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 hydrophobic and oleophobic organic silan precursors.

### Main Advantages

- Natural textile with additional characteristics: hydrophobic and oleophobic
- Washable



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