



**vileda**<sup>®</sup>  
PROFESSIONAL

# CE Wiping Innovation Systems

Achieve a next level clean  
for your facility.

**NEXT  
LEVEL  
CLEAN**

a brand of  
 **FREUDENBERG**

**The essence of  
70 years forward  
thinking:**

**NEXT  
LEVEL  
CLEAN**

Everything we do grows from a constant dialogue with our customers. This made us a world leader in innovative cleaning solutions for controlled environments. We provide a complete contamination control concept including planning, trial programs, training and after sales care.

We believe in making people work smarter, not harder. That is why we focus on ergonomics, performance and design at every stage of the R&D phase, while using unique and patented technologies. All that to help you realise a higher standard, a **NEXT LEVEL CLEAN**, sustainably!



# EvoControl®

## Next generation surface cleaning

Simple questions with huge implications. What could a facility shutdown cost you? What could disposal of a complete production batch cost you? With innovation led mechanical cleaning solutions, you can safeguard efficient daily production processes, at least from a contamination control perspective.

A current and key consideration is the long-awaited update of the **GMP Annex1** regulations. These regulations provide specific guidance on the manufacture of sterile medicinal products and focuses in detail on critical contamination control procedures.

The new update also clearly communicates there is and should be a distinct operational difference between disinfection and cleaning and both practices should be treated to that effect. This updated version of GMP Annex1 has been developed considerably and now puts a huge focus on a 'total contamination control' strategy for your facility.

**EvoControl®** is the key to achieving the next level of contamination control. **EvoControl®** provides revolutionary wiping results thanks to its unique microfilament structure. We've been around long enough to know what you need to eliminate contamination.

High-tech materials and best-in-class cleaning performance is the output of our extensive R&D expertise.

So, how do we make a difference to your business? Our offer means that you take advantage of market and innovation leading mechanical cleaning and wiping solutions, that meet the industries strict demands on contamination control.

When choosing Vileda Professional cleanroom wipes, you can be sure you are using a system designed and manufactured by professional cleaning experts. Throughout the years Vileda Professional has developed a complete cleanroom concept, innovative solutions and mechanical cleaning systems, based on over 70 years experience of high-tech cleaning and extensive industry experience.

### ? DOES...

... GMP Annex1 regulation revision present new SOP's challenges with regards to contamination control in your facility?

### 💡 NEED...

... high level mechanical cleaning performance and robust contamination control processes? These are key to profitable production of pharmaceuticals, medical devices and micro-electronics.

### ⚠️ SUFFERING...

... from insufficient or careless cleaning of critical surfaces, precision instruments and machinery? Daily maintenance is business critical to eliminate downtime at your facility.

### 📈 ULTIMATELY...

... want to maximise and improve your contamination control practices and protocols?



# Manufacturing process



1 Polyester and polyamide chips ready for processing.



2 The chips are then melted creating a workable blend.



3 The melted blend is then spun to create endless bi-component filaments.



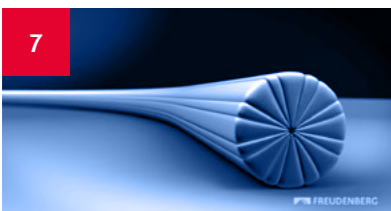
4 The new filaments are uniformly laid on a belt.



5 The filament web is then created.



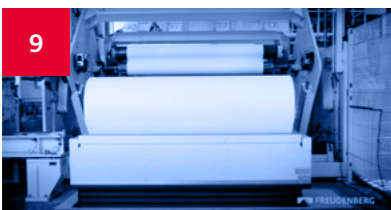
6 The entanglement process begins as the fabric web passes through high-pressure water jets.



7 This process simultaneously entangles and splits the bi-component filaments.



8 Resulting in ultra-fine microfilaments created.



9 Evolon® microfilament fabrics are manufactured with no solvent or chemical binder.



10 The hydroentanglement water is recycled and re-used internally in our business.

# Quality control

Evolon® material is manufactured in a state-of-the-art certified production facility according to ISO 9001, 14001, 45001, & 50001 standards.

Specific only to Evolon®, production equipment invented by Freudenberg are used in the production of Evolon® & EvoControl® wipes. Stringent quality management and expertise are fundamental to our rigorous quality assurance process. Our certified in-house laboratory operates with the most hi-tech testing and validation equipment that adhere to the strict guidelines our industry demands.

EvoControl® wipes are laundered & packaged in a certified ISO 4 cleanroom, ensuring a clean environment and is supported by an in-house laboratory. Documentation available includes a CoA (Certificate of Analysis) for each batch/lot of product. The CoA details the following technical information.



## DIMENSIONAL MEASUREMENTS

- Sorbent Capacity & Sorbency Rate (IEST-RP-CC 004.4, Sec 9.1-9.2)
- LPC (IEST-RP-CC 004.4, Sec 7.2.1, orbital shake method)
- NVR (IEST-RP-CC 004.4, Sec 8.1.1)
- FTIR (IEST-RP-CC 004.4, Sec 8.2.1)
- Ionic Contamination (IEST-RP-CC 004.4, Sec 8.2.2 short term extraction)

## STERILE PRODUCT SPECIFICS

- Associated Certificate of Irradiation
- Product evaluation at maximum dose for each batch/lot
- Fully validated sterile according to ISO 11137
- Sterility assurance level of 10-6



# EvoControl®

## Residue free cleaning starts here

EvoControl® is based on Evolon®. EvoControl® is the next generation microfibre cloth manufactured from endless microfilaments measuring 0.15 dtex (x10 finer than standard Polyester microfibers, x100 finer than a human hair). The unique fabric combines high performance textile delivering highly efficacious mechanical cleaning properties.

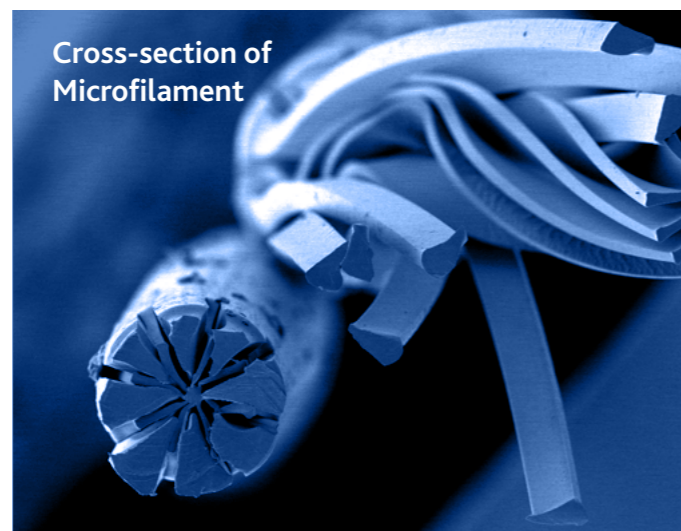
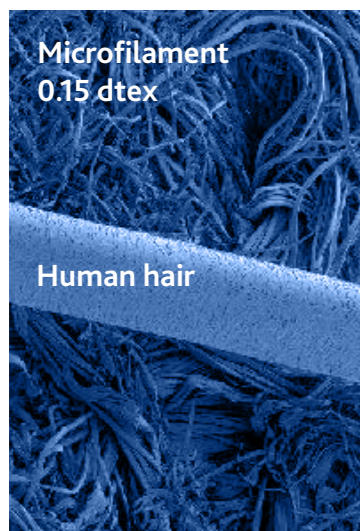
### Remove contaminants in one wipe

Wipe the surface to remove liquid or spillage, leaving the surface clean and free of residual contamination. This is critical for wiping spills and removing particles from a surface, with EvoControl® wipes it is achieved in one single movement – even on stubborn contaminants.

EvoControl® has been rigorously tested by an independent institute validating 99.999% bacterial removal from surfaces, without the use of disinfectants. The key is our unique and patented Evolon® microfilament material. To you it means you save time, money and achieve a next level clean for your facility.

### Distribute disinfection

The balance between liquid absorbency and release to the surface is ideal for applying a film of disinfectant to a surface in cleanroom areas. EvoControl® wipes have been developed and designed to hold the optimum amount of liquid, distributing it readily and evenly onto the surface, and therefore reaching desired and critical disinfection protocols.



# EvoControl®

## Achieve a higher classification of clean

# EvoControl®

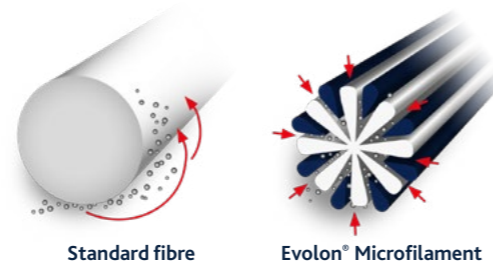
## Ready for the future

### Key Benefits

- The **outstanding cleaning power** of Evolon® microfilaments pick up the finest dust particles, remove grease and the toughest contaminants.
- Isotropic and high tensile strength.** One wipe can be re-used several times.
- Low linting properties.**
- Residue free cleaning** remove particulates and contaminants in one wipe.
- Reduced waste,** number of cloths used and also weight of waste processed.
- Spend To Save,** budget friendly versus conventional, mono-material wipes.

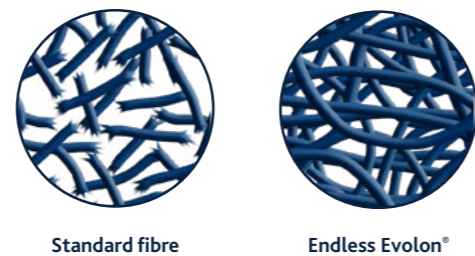
### Unrivalled particle pick up properties

Particulates are attracted and gathered inside the microfilament pie segmented structure. Standard fibre wipes can paint/spread particulates across the surface.



### Let's talk about linting

**Endless Evolon®** microfilaments have low linting properties. **Standard fibres** have the potential to lint as they are single, short lengths generally that do not exceed a few centimeters in length.



### A sustainable option for the future

The base material of **EvoControl®** is durable and designed for demanding applications. **EvoControl®** generates less waste than conventional wipe alternatives.

### Safe composition

No solvent is used to generate the microfilaments and no chemical binder is used during the manufacturing process of our **EvoControl®** wipes. Our microfilament textiles are also PVC-free.

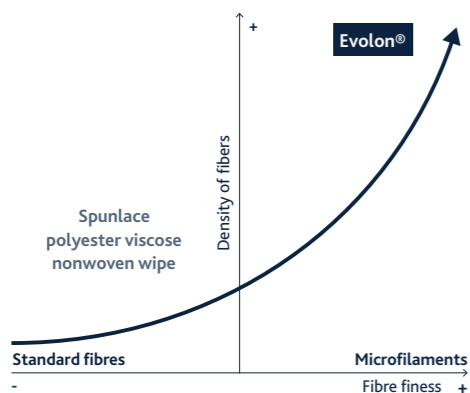


### Preservation of resources

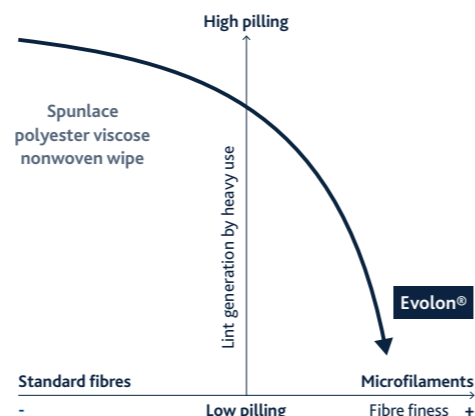
**EvoControl®** technology helps to save raw materials compared with the production of traditional textiles. **EvoControl®** microfilament textiles are 2 to 4 times lighter than traditional wipe materials achieving superior mechanical cleaning performance.

Furthermore, the water used during manufacturing is recycled and re-used internally. Thanks to this process, the fabric was awarded a special environmental prize: Eco-Trophée du Parc Naturel Régional des Ballons des Vosges. In addition to ISO 14001 certification, the manufacturing site of Evolon® microfilament textiles from which **EvoControl®** is made is ISO 50001 certified for its energy management system.

Evaluation of the cleaning performance based on scientific criteria



Evaluation of the defect rates generated by lints



Relative positions based on internal measures in laboratory

	Low particle release	Bacterial & particle removal	Residue removal	Wiping of delicate surface	Wiping of rough surfaces	Wiping of glass & stainless steel	High absorbency required	Re-usable (lauderable)	ISO Class
EvoControl® 200	●	●	●	●	●	●	●	●	6-9
EvoControl® 400	●	●	●	●	●	●	●	●	4-9
EvoControl® 400 Sterile	●	●	●	●	●	●	●	●	4-9
EvoControl® 500	●	●	●	●	●	●	●	●	4-9

● Ideal ● Good ● Not recommended



# EvoControl®

## For every usage occasion



### EvoControl® 200

Disposable, precision cleaning wipe  
Designed for fine wiping. Laser cut for areas where moderate contamination control is required.

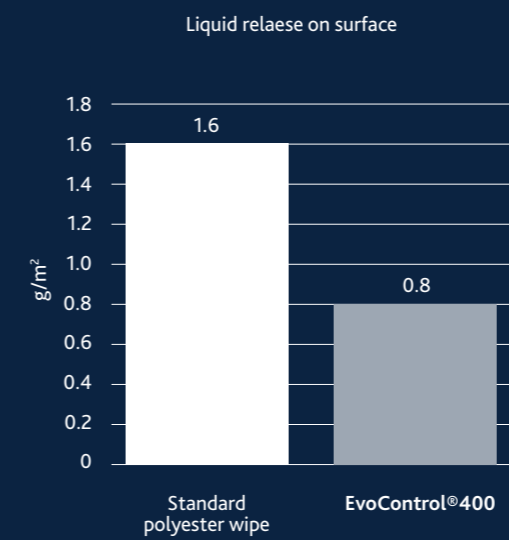
### EvoControl® 400 Sterile & Non-Sterile

Disposable, liquid cleaning wipe  
Designed for contamination removal. Pre-laundered, laser cut designed for the removal of acids and chemical spills.

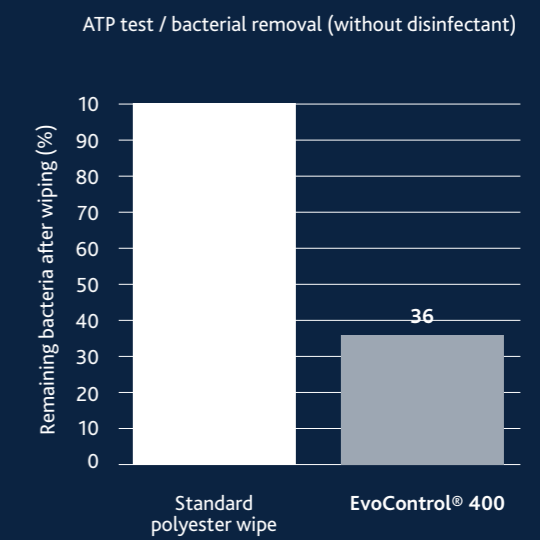
### EvoControl® 500

Contamination collector & residue remover  
Designed for liquid removal. Pre-laundered, laser cut and durable enables microporous cleaning to improve validation SOP's. Disposable or can be laundered up to 10 washing cycles.

Art No / Case TSU	Art No / Pack BCU	Description	Size cm	Packs Per Case	Application
142854	142878	EvoControl® 200	22.8 x 22.8	20 x 150 pcs.	ISO 6-9 / Autoclaveable
142855	142879	EvoControl® 200	30.4 x 30.4	20 x 150 pcs.	ISO 6-9 / Autoclaveable
142856	142880	EvoControl® 400	22.8 x 22.8	10 x 150 pcs.	ISO 4-9 / Autoclaveable
142857	142881	EvoControl® 400	30.4 x 30.4	10 x 150 pcs.	ISO 4-9 / Autoclaveable
173320	173321	EvoControl® 400 Sterile	22.8 x 22.8	20 x 20 pcs.	ISO 4-9 / Autoclaveable
173322	173323	EvoControl® 400 Sterile	30.4 x 30.4	20 x 20 pcs.	ISO 4-9 / Autoclaveable
142870	142884	EvoControl® 500	22.8 x 22.8	10 x 150 pcs.	ISO 4-9 / Autoclaveable
142871	142885	EvoControl® 500	30.4 x 30.4	10 x 150 pcs.	ISO 4-9 / Autoclaveable



EvoControl® wipes release 50% less liquid onto the surface compared to standard knitted polyester wipes. This avoids leaving residues / contaminations on the surface.



EvoControl® removes contaminations more efficiently from the surface thanks to the mechanical cleaning performance of Evolon® fabric.



## Unrivalled contamination control, biocontamination pickup and residue removal performance

### Vileda Professional – a part of the Freudenberg Group

Vileda Professional provides innovative cleaning solutions for professional users in various application areas, such as General Building, Healthcare, HoReCa and Controlled Environment. With sales offices in all major European countries, in North America and Asia – and with a wide net of representatives – we are well located around the world. Vileda Professional belongs to the Freudenberg Group – a diversified, family-run global company, headquartered in Germany.



Discover more at  
[ce.vileda-professional.com](https://ce.vileda-professional.com)