

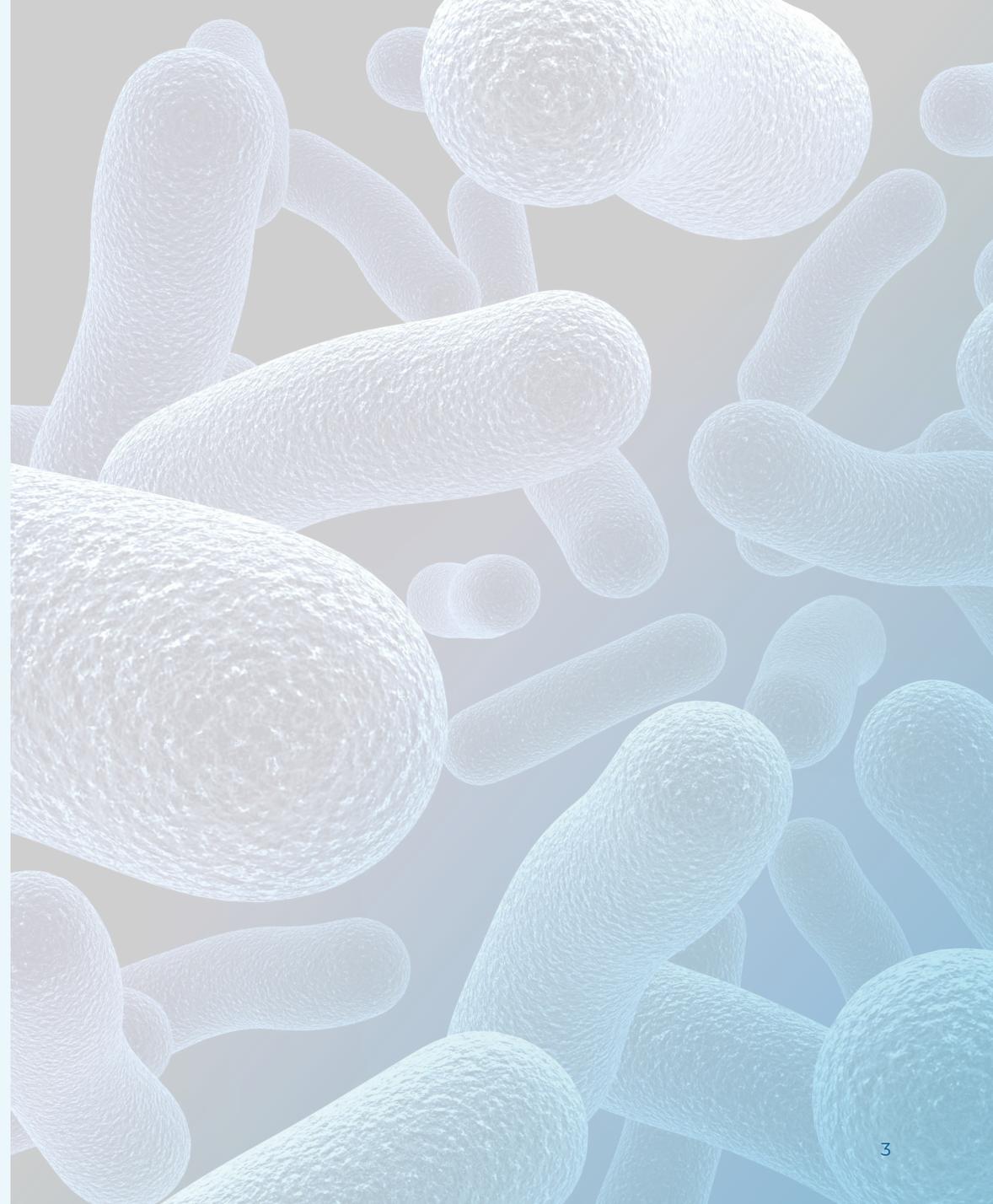


Replenish your spaces  
with **probiotics that protect**

# Contents

- Enzyme- and bacteria-based products
- PolVita<sup>®</sup>, probiotics that protect
- PolVita<sup>®</sup> Air & electrostatic misting technology
- PolVita<sup>®</sup> gives children a smile

## Enzyme- and bacteria-based products





## Enzyme- and bacteria-based products

These products are using **nature's best properties**

They contain:

**beneficial, living bacteria** (that digest dirt), also known as "**probiotics**"

and/or byproducts produced by those beneficial bacterial, such as

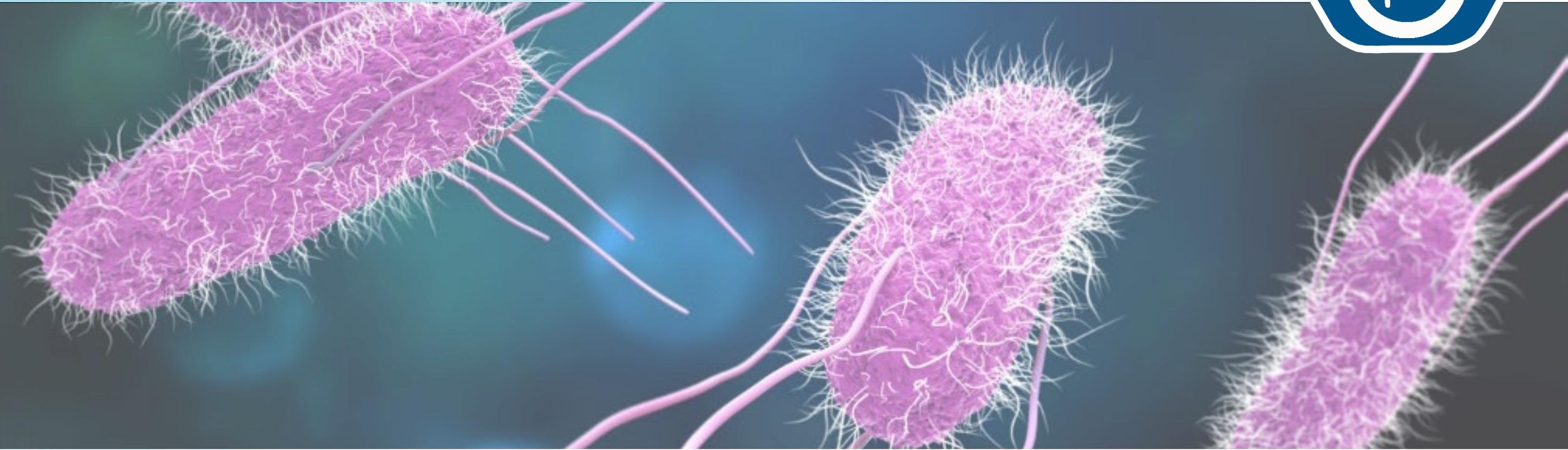
- **enzymes** (which break up the dirt),
- **natural organic acids** (with descaling properties)

... instead of the pure chemical components usually found in cleaning products

# What is a bacteria?

These are **living** cells:

Usines  
à enzymes



Who are able to **multiply**



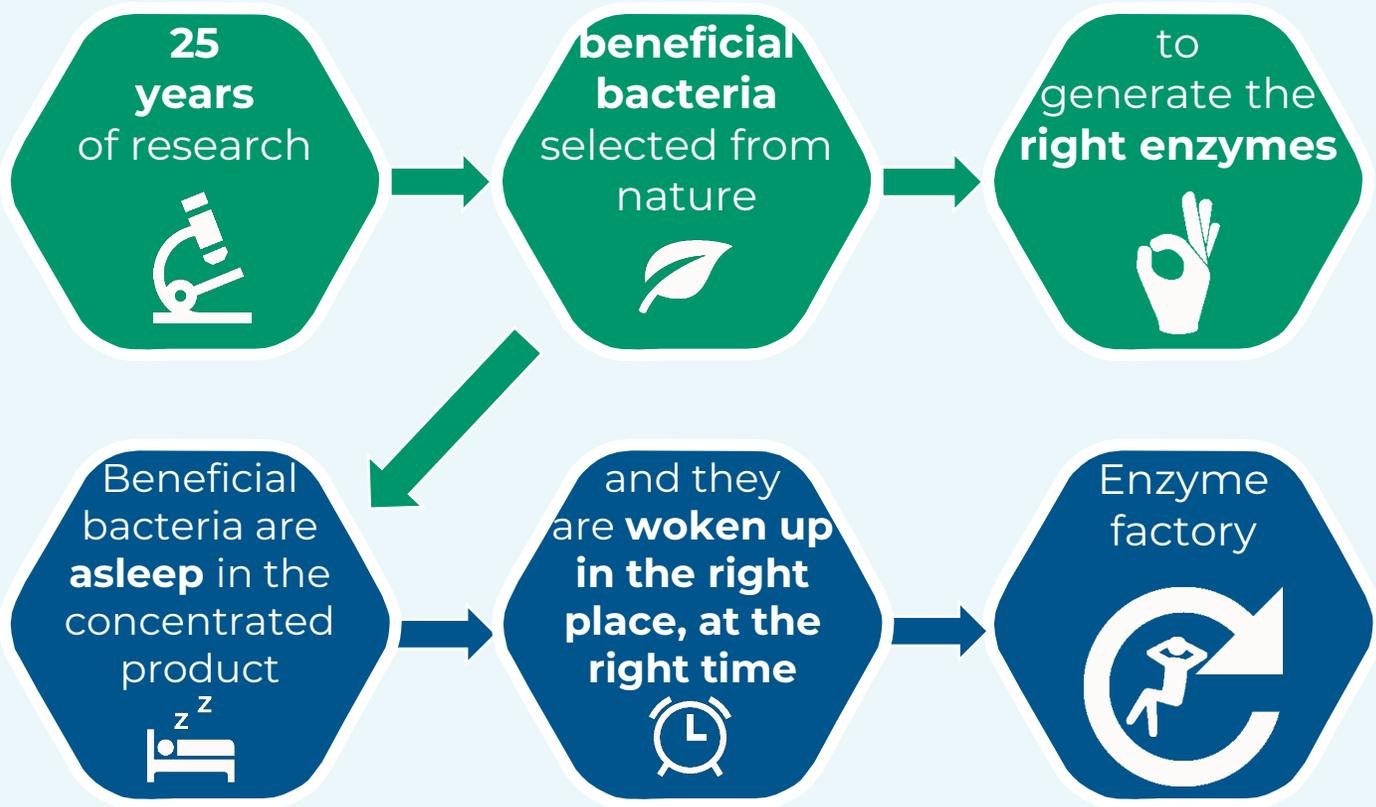
To **produce enzymes** in unlimited quantities



And to **digest dirt** which has previously been broken up by the enzymes



# Expertise in probiotic bacteria



# The natural, probiotic cleaning cycle



① Pollet selects beneficial bacteria in nature.



② Pollet concentrates them and stabilizes them in efficient cleaning products.



③ When the beneficial bacteria get in touch with the dirt, they wake up.



④ The beneficial bacteria produce enzymes.



⑤ The enzymes break the dirt into pieces.



⑦ The bacteria, enzymes and digested dirt are released back into nature.



As long as there's dirt to digest, the beneficial bacteria will continue to multiply, to generate enzymes and to digest the dirt.

⑥ The beneficial bacteria digest the dirt.



Provides solutions to problems that traditional chemistry cannot solve



# The probiotics that protect



# An evolution in cleaning



*“**Cleaning** in the **21st century** should not limit itself to making surfaces less dirty. It should **protect our environment** and make it **healthier**.”*

# Examples of places where bacteria hide



# Bacteria, a major challenge in any business sector



Your office desk contains on average  
**400 times more bacteria** than a toilet seat.

# What are probiotics?



**Probiotics** is the opposite of **antibiotics**.  
These products **promote life** by using beneficial bacteria



# Probiotics are everywhere!



# The PolVita® beneficial bacteria are at your service

With **POLVITA®**, you spread billions of beneficial bacteria that cover your surfaces and create a protective natural microflora.

A simple cleaning that **improves your environment and promotes well-being\***

\* According to the OCDE Better Life Index



**PolVita<sup>®</sup>**, an unparalleled technology!



**Polvita<sup>®</sup>** is the result of **3 years of scientific research** that has made it possible to select natural **bacteria** that have **unique probiotic properties**



# PolVita<sup>®</sup>, a unique triple action mode



## Eco-superior cleaning



**Eco-superior** products and **without any risks**

Since 1960

## Probiotics



Bacteria that eliminate bad smells and clean **in-depth and continuously**

Since 1993

## That protect



A **natural, protective microflora** populates your surfaces with beneficial bacteria

Since 2016





## Solid scientific evidence



**Research** in collaboration with the University of **Liège** (BE)

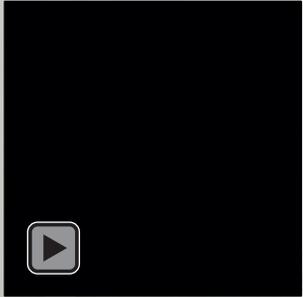


Efficacy test on surfaces by independent labs

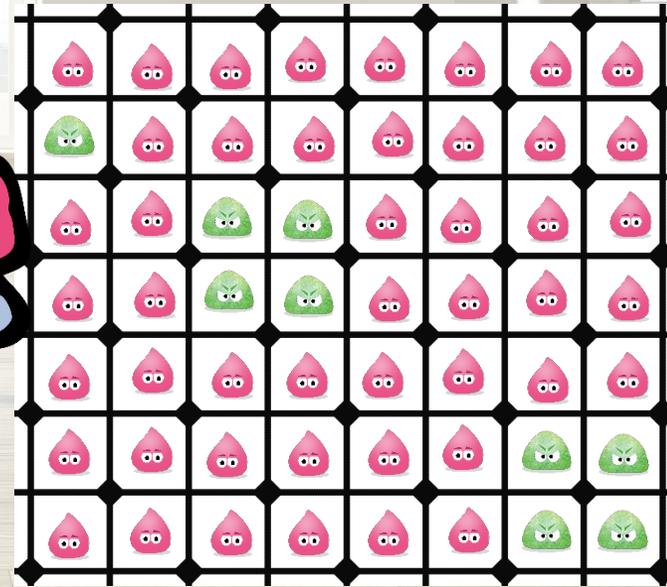


**Laboratory validation** of efficacy

# PolVita® bacteria create a natural, protective microflora



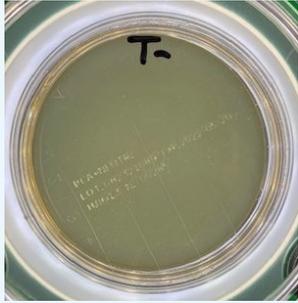
**PolVita®**  
bacteria occupy  
the surface  
really fast



-  PolVita bacteria
-  Other micro-organisms

# PolVita® bacteria remain stable on surfaces for at least two weeks

PolVita® bacteria continue to be present on your surfaces long after the cleaning has stopped. This ability to obtain long-term viable probiotic spores after initial cleaning helps to digest and remove any new dirt whenever it appears, up until 2 weeks after the initial cleaning.

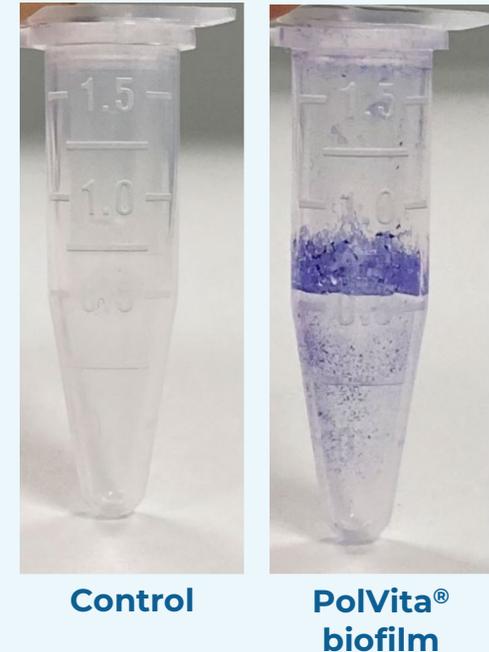
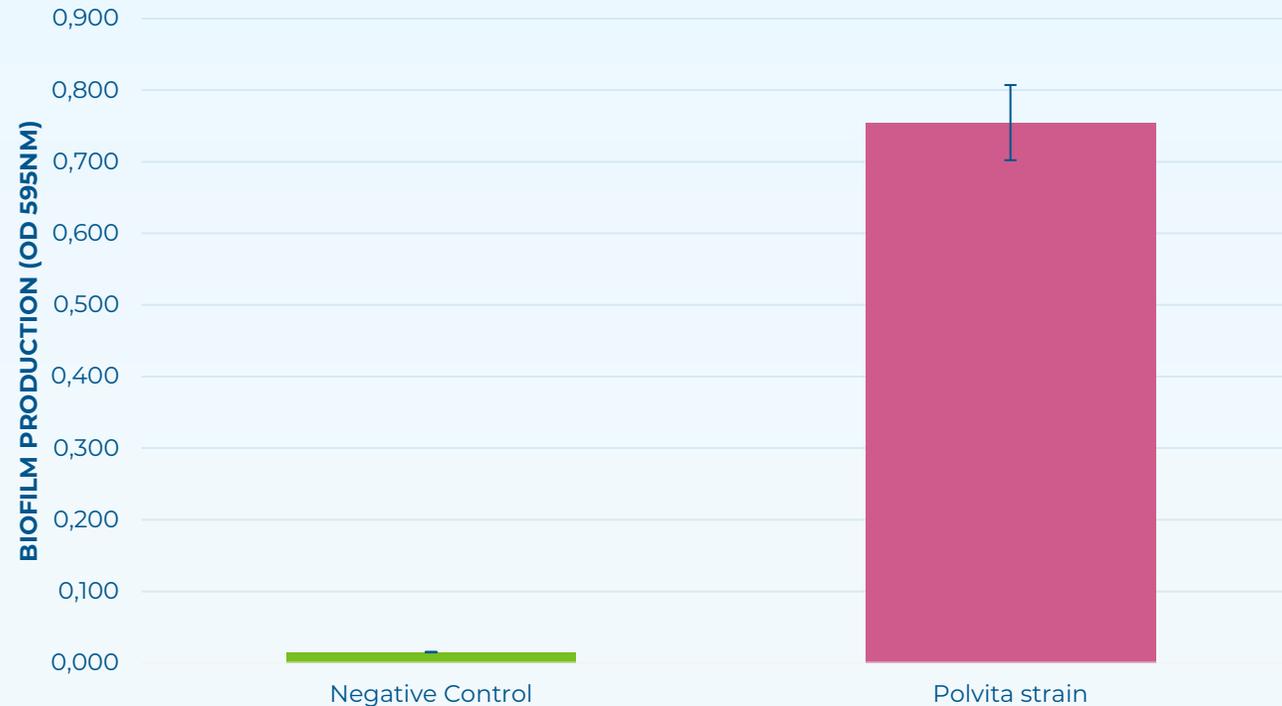
	Negative Control	Day 1	Day 3	Week 1	Week 2
PolVita probiotics 0,4%					

**PolVita® probiotics persistence on surfaces was proven for at least two weeks** by applying PolVita® diluted at 0,4% on a glass table and checking the strain viability and cultivability by incubating contact plates for 24h at 37°C.

# PolVita® bacteria produce a protective biofilm

PolVita® bacteria produce a biofilm. This layer is a protective microflora.

## Biofilm production by PolVita probiotics



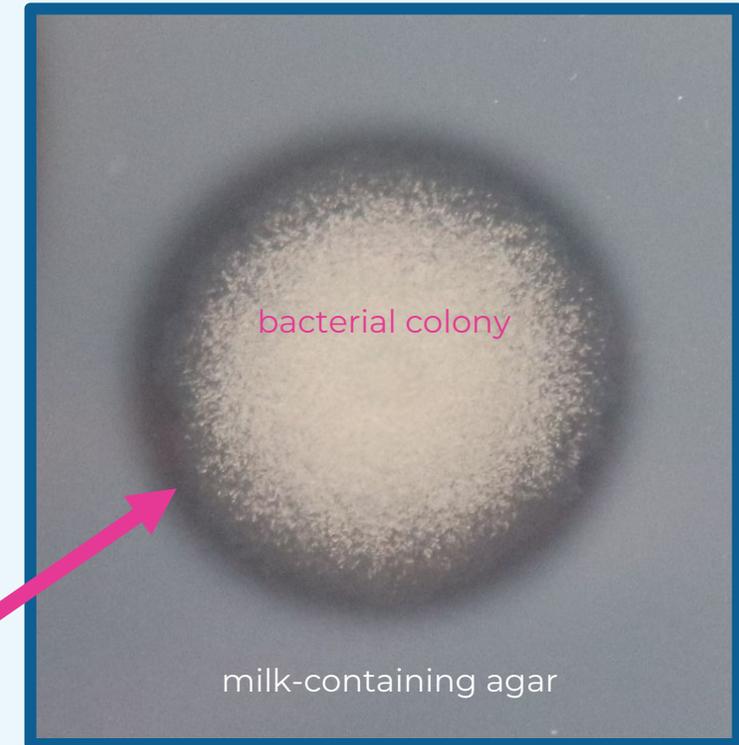
**Violet crystal staining method:** we put the PolVita® bacteria in a liquid medium for 24h, and they form a biofilm. Crystal violet is added to fix the biofilm. The more biofilm is formed, the deeper the violet colour. The amount of biofilm formed can be semi-quantified by optical absorbance measured by spectrophotometry. (Control tube contains only culture media.)

# PolVita® enzymes degrade organic dirt

The PolVita® bacteria produce enzymes that are able to degrade (organic) dirt and use it as a source of nutrients.

*We seeded the surface of a milk-containing agar with spores of PolVita® bacteria and incubated them at room temperature (to mimic field conditions). The spores germinated in the presence of the nutrient media and started producing enzymes (proteases). These enzymes digest the casein proteins contained in milk, resulting in the appearance of a visibly clear area around the bacterial colony.*

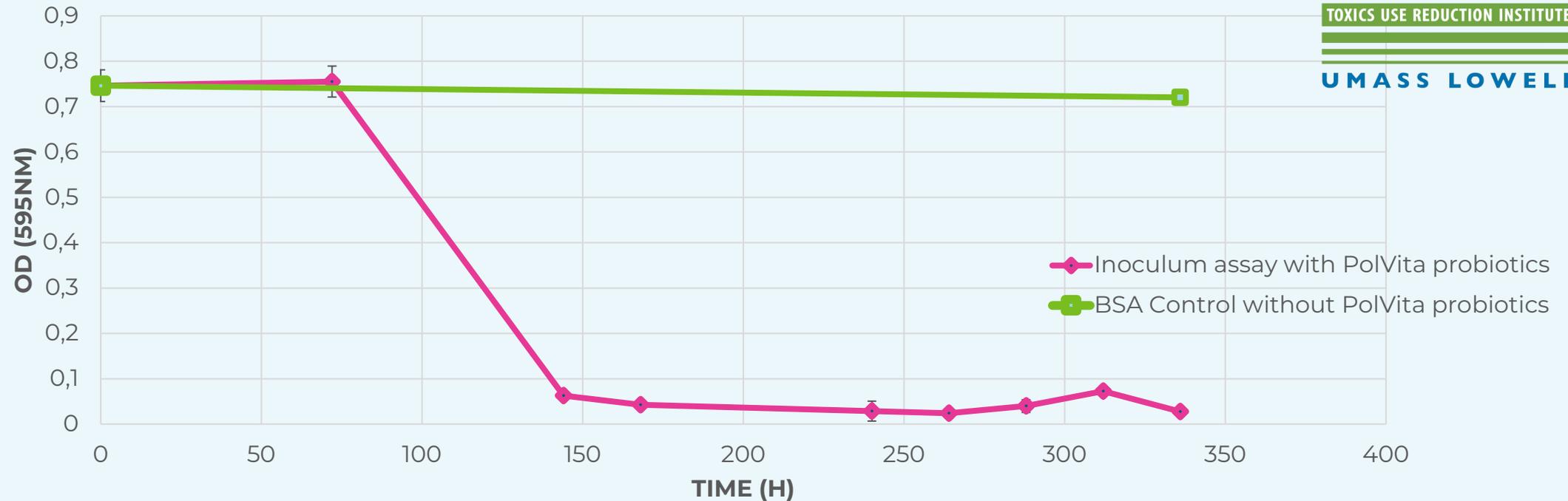
Visibly clear area around the bacterial colony where the milk proteins are broken down by the PolVita® enzymes



# Continuous cleaning for 14 days, dirt 92% degraded after 3 days

It only took PolVita® 3 days to digest the (organic) dirt for 92% ! The PolVita® bacteria continue to do their cleaning job on your surfaces for at least 14 days in total, at room temperature and without any human intervention. This is what we call continuous cleaning.

## Protein degradation by PolVita probiotics at room temperature



**TURI**  
TOXICS USE REDUCTION INSTITUTE  
UMASS LOWELL

The spores (dormant bacteria) contained in the PolVita® cleaners turn into living bacteria as soon as they get in contact with soiling. These bacteria start producing enzymes that break down the dirt (here: proteins) into smaller components, which are then digested by the bacteria and are a lot easier to remove by mechanical action.

## To summarise, PolVita® probiotic bacteria are proven to...

1. ... continue to be **present on your surfaces** long after the initial cleaning. They are capable of digesting any new dirt **for up to 2 weeks (14 days) after cleaning.**
2. ... **produce a protective biofilm.** This layer is a protective microflora.
3. ... **produce enzymes that degrade (organic) dirt** and use it as a source of nutrients.
4. ... **digest (organic) dirt for 92% in only 3 days and continue clean your surfaces for at least 14 days,** at room temperature and without any human intervention. This is what we call **continuous cleaning.**



# What differentiates Pollet's eco-superior cleaning



Effective

Eco-certified

Unique perfume

Simple and controlled dosing

Color code visible after dilution

Products without risks

Biodegradable

Biodegrading

Without danger for materials

No binding OELs

Fixed use cost

Labels easy to read



# Probiotics that eliminate bad smells and clean in depth and continuously



Auto-cleaning

Destroys annoying smells

Time saving

Natural bacteria

In-depth cleaning & Higher level of cleanliness

Improved ergonomics



# Guarantees of safe use



**Natural** strains



Genetic **identification** by **Ghent University** (BE) laboratory



Proven **biocidal sensitivity**



Strains without genetic modifications (**non-GMO**)



**Harmless** to humans, certified by the **EFSA**

# A complete range suitable for any environment



Pollet promotes your well-being in any environment



Electrostatic misting



Neutral pH

Neutral pH

pH 4\*



(\*) spray dosing

# Clean better without any extra effort

The Sinner circle remains relevant, and therefore **your working methods remain unchanged!**



You simply **simply replace** your conventional cleaners **with protective probiotic cleansers.**



# Misting allows you to reach every nook and cranny



Electrostatic technology makes it possible to reach complex surfaces





# Some application examples of PolVita® Air



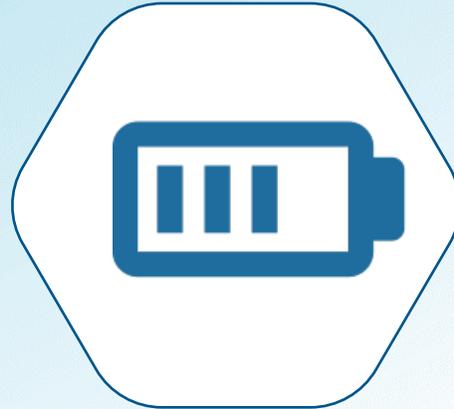
Misting allows you to reach every nook and cranny



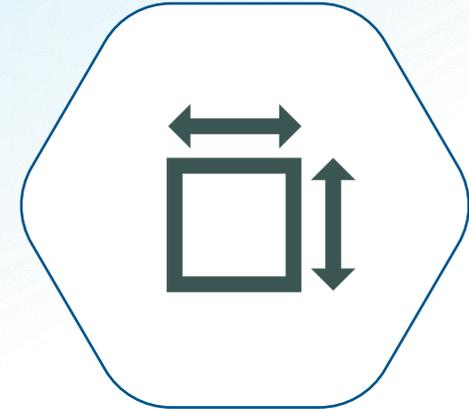
# Misting is simple & efficient



1,7kg  
(2,7kg)



4 hours = 20 containers



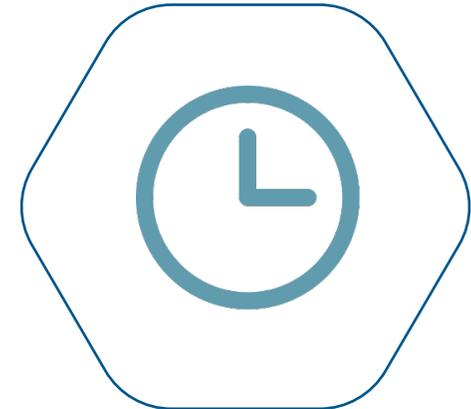
1 container = 260 m<sup>2</sup>



60 - 90 cm

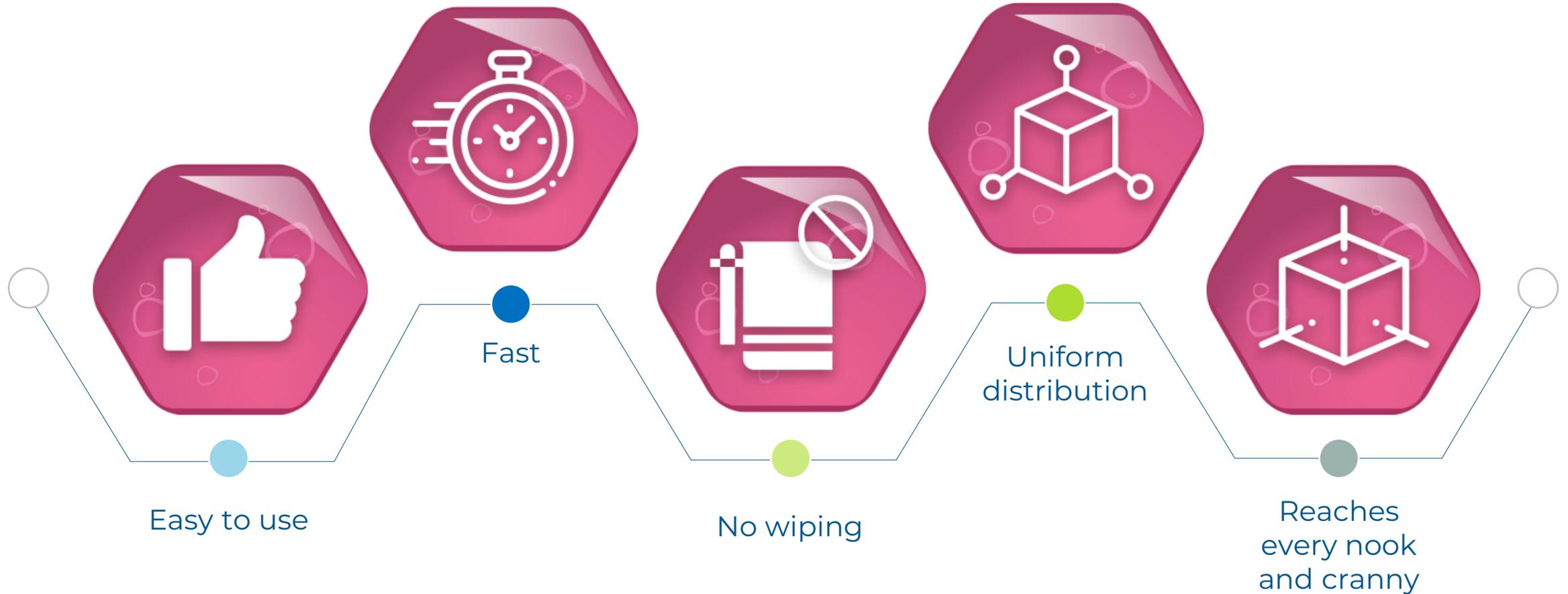


Droplets 40, 80  
or 110µm



1 container = 11 min.

# The advantages of electrostatic misting



# PolVita<sup>®</sup>, a lot more than simple bacteria



Economical efficiency



Technical efficiency



Ecological efficiency at the service of humans and nature



Expertise in biotechnological efficiency since 1993



Probiotics that protect





## Who has PolVita® been created for?

PolVita responds to an overriding need to protect human health in three important areas:

- places where **a large number of people** gather (large companies, airports, train stations, etc.)
- places sensitive to people's **well-being**, such as the **healthcare** sector (hospitals, care for the elderly or disabled, medical and paramedical centers), **institutions, hotels, wellness centers**, etc.
- And also **employers** concerned with their employees' health

# PolVita® gives children a smile

5%



5%\* of PolVita sales go to the Cliniclowns



(\* ) With a yearly maximum of 10.000 euro



# Thank you

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