

The influence of the product on the key organisms of the respective body region was examined.

### Information about the tested product:

#### Manufacturer:

Pollen Enterprises Limited  
10 Dow Close  
9305 Wanaka  
New Zealand

#### Name of the product:

Maubl - Intimate Refreshing Mist

<b>Product type:</b>	Final product
<b>Application:</b>	Leave-on
<b>Dilution:</b>	No
<b>Sample received:</b>	12 February 2024
<b>Test Start:</b>	13 February 2024
<b>Test End:</b>	26 February 2024
<b>Test Standard:</b>	<b>MyMicrobiome Standard 25.10 Vulvo-Vaginal</b>
<b>Test result:</b>	<b>1.3</b>
<b>Certification:</b>	granted

## Test description

The MyMicrobiome Standard evaluates the influence of cosmetics, personal care products and pharmaceuticals on microbial key players located at specific skin or mucous membrane sites.

An intact vulvo vaginal microbiome has a fundamental influence on female health. Products suitable for the intimate area must also be microbiome-friendly and ensure the maintenance of the balance among the vulvo vaginal microorganisms of the user.

Every person's microbiome is unique. Each body area, however, harbors a characteristic composition of bacteria, viruses and fungi. The test examines the product's influence on the key organisms typical for each body area and thus offers a standardized procedure.

## Various aspects are examined:

### The microbial quality of the product.

To be evaluated according to our standard, the product needs to be free of contaminants. This is verified in the microbial quality test.

### The influence of the product on the natural, healthy vaginal balance.

The commensal bacterium *Lactobacillus crispatus* is co-cultivated with the pathogenic bacterium *Gardnerella vaginalis*. The co-culture is brought in contact with the product to be tested, which should not disturb the balance between friendly and harmful bacteria.

### The influence of the product on the bacterial diversity of the specific body region.

Each body region is colonized by a certain set of microorganisms. For healthy microbiome, it is particularly important to maintain this biodiversity. The influence of the product on the respective microbial composition of the vulvo vaginal area is examined in the test. The aim is to find as many key organisms as possible after contact with the product.

### The influence of the product on the growth behavior of the microbes of the specific body region.

In addition to the diversity of the microorganisms in a specific body area, the growth of the individual key organisms should not be influenced by the product. The key organisms of the vulvo vaginal area are brought into direct and indirect contact with the product and their growth is observed.

### Results

#### The microbiological quality of the product.

The prerequisite for the test for microbial friendliness is the microbiological quality of the product based on DIN ISO 17516. The following table contains the limit values for contaminants that must be observed.

Types of organisms	Limit values
<b>Total aerobic microbial count (TAMC) and total combined yeasts/ moulds count (TYMC)</b>	≤ 20 cfu*/g or ml

\* colony forming units (cfu)

#### Results microbiological quality

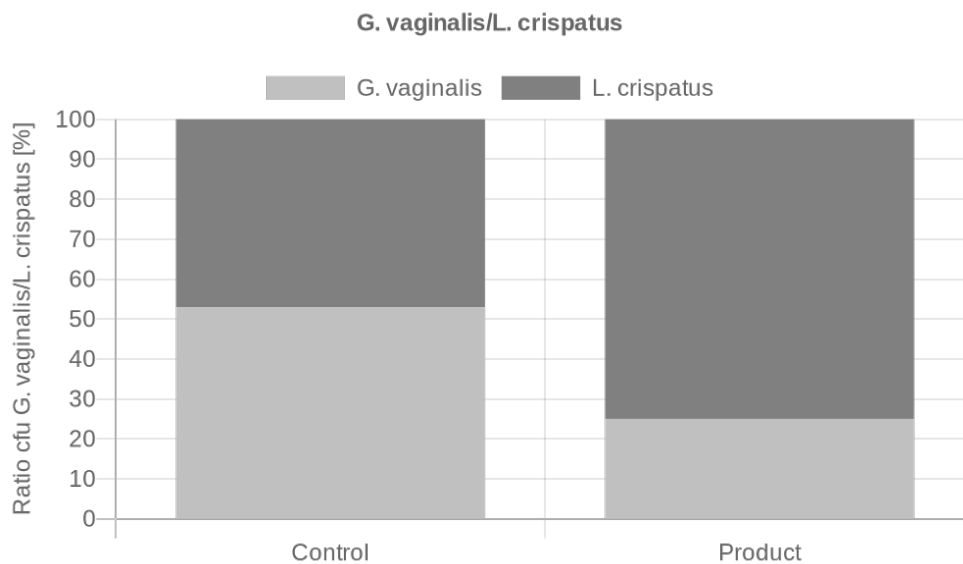
Parameter	Sample no.: 24.854.25.1
TAMC and TYMC [cfu/0,1 ml]	< 20

The microbiological quality of the product is fulfilled.

## Results

### The influence of the product on the natural, healthy vaginal balance.

A co-culture of *L. crispatus* and *G. vaginalis* is incubated with the product for 15 min (rinse-off) or 4h (leave-on). Bacterial counts are determined and the cfu ratio of the two bacteria in the presence of the product is assessed and compared to the control sample (PBS).

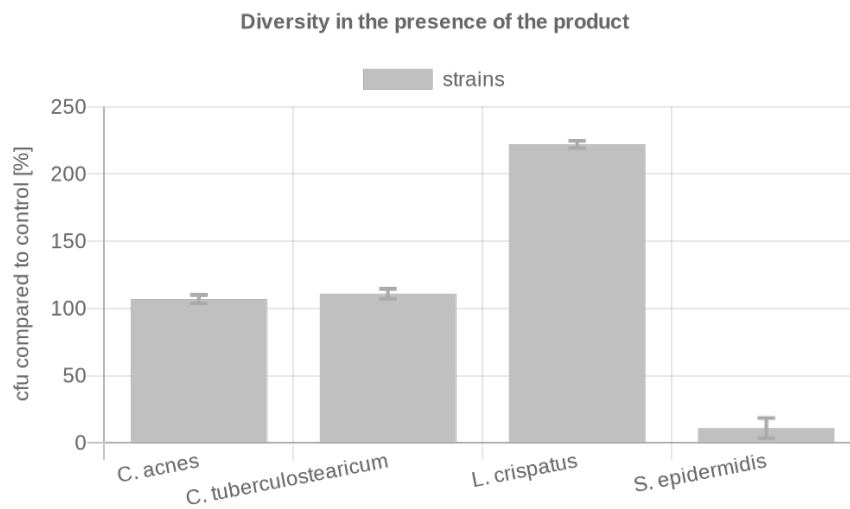


	cfu/ml		Ratio Product/ Control	Grade
	<i>G. vaginalis</i>	<i>L. crispatus</i>		
<b>Control</b>	1906.7	1686.7	3.5	<b>1.0</b>
<b>Product</b>	415	1266.7		

## Results

### The influence of the product on the microbial diversity of the specific body region.

Cultures of the key organisms present in the vulvo vaginal area are incubated with the product for 15 min (rinse-off) or 4h (leave-on). Bacterial colonies are counted, and the cfu ratios in the presence of the product are calculated in % relative to the control sample (PBS).

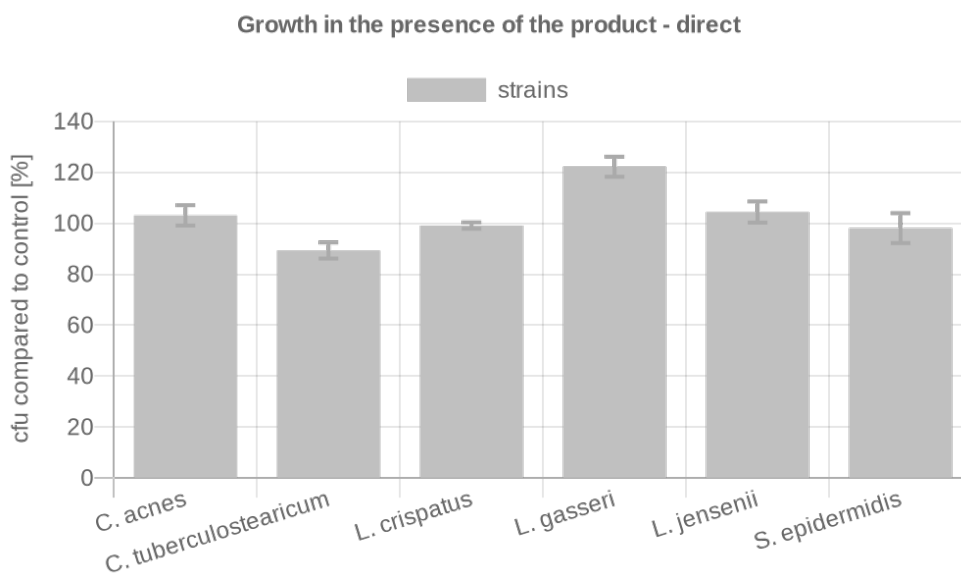


Key-Microbe	t=	4h	Rating
	cfu/ml		
<i>C. acnes</i>	Control	1246.7	1
	Product	1330	
<i>C. tuberculostearicum</i>	Control	166.7	1
	Product	185	
<i>L. crispatus</i>	Control	4453.3	1
	Product	9900	
<i>S. epidermidis</i>	Control	5470	3
	Product	610	
<b>Overall rating:</b>			<b>1.5</b>

## Results

### The influence of the product on the growth behavior of the microbes of a specific body region – directly.

The influence of the product on the growth of each individual key organism of the vulvo vaginal area is investigated and the cfu ratio in the presence of the product is calculated in % relative to the control sample (PBS). Product contact with microorganisms is direct.



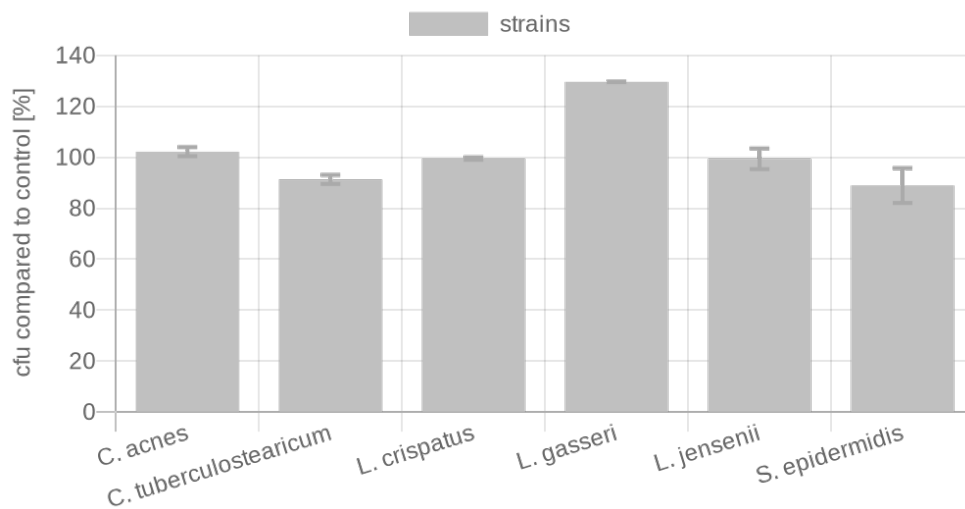
Key-Microbe	cfu/ml		Rating
	Control	Product	
<b>C. acnes</b>	Control	413	1
	Product	426	
<b>C. tuberculoostearicum</b>	Control	3103.7	2
	Product	2770.7	
<b>L. crispatus</b>	Control	4101	1
	Product	4064.7	
<b>L. gasseri</b>	Control	375.7	1
	Product	459	
<b>L. jensenii</b>	Control	187	1
	Product	195.3	
<b>S. epidermidis</b>	Control	366.7	1
	Product	359.7	
<b>Overall rating:</b>			<b>1.2</b>

## Results

### The influence of the product on the growth behavior of the microbes of the specific body region - indirectly.

The influence of the product on the growth of each individual key organism of the vulvo vaginal area is investigated and the cfu ratio in the presence of the product is calculated in % relative to the control sample (PBS). Product contact with microorganisms is indirect.

Growth in the presence of the product - indirect



Key-Microbe	cfu/ml		Rating
<b>C. acnes</b>	Control	286.7	1
	Product	293	
<b>C. tuberculoostearicum</b>	Control	2977	2
	Product	2719.3	
<b>L. crispatus</b>	Control	4164.3	1
	Product	4143	
<b>L. gasseri</b>	Control	409.3	1
	Product	530.5	
<b>L. jensenii</b>	Control	175.7	1
	Product	174.7	
<b>S. epidermidis</b>	Control	362	2
	Product	321.7	
<b>Overall rating:</b>			<b>1.3</b>

## Results

The results are evaluated with grades from 1 (one) to 3 (three).

The product has passed if it obtains grades between 1.0 and 2.0.

1.0 – 2.0 = Microbiome-friendly | 2.1 – 3.0 = Microbiome-influencing

Test	Grade
Balance of the vaginal microbiome	1.0
Diversity of the corresponding microbiome (x2)	1.5
Product contact direct (x2)	1.2
Product contact indirect	1.3
<b>Overall grade</b>	<b>1.3</b>

**With an overall grade of 1.3 the seal „Microbiome-friendly“ is awarded according to MyMicrobiome Standard 25.10 Vulvo-Vaginal.**

Place, Date: Balzers, 30 September 2024

Responsible person: Dr. Kristin Neumann

Signature:

