

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

### Information about the tested product:

#### Manufacturer:

MAS Capital (Private) Limited – Femography division  
199 Kaduwela Road  
10120 Battaramulla  
Sri Lanka

#### Name of the product:

Vaginal Health Undergarment

<b>Product type:</b>	Woven
<b>Application:</b>	4 h
<b>Decontamination:</b>	washing, autoclaving
<b>Sample received:</b>	17 February 2025
<b>Test Start:</b>	18 February 2025
<b>Test End:</b>	05 March 2025
<b>Test Standard:</b>	<b>MyMicrobiome Standard 45.10 Vulvo-Vaginal</b>
<b>Test result:</b>	<b>2.0</b>
<b>Certification:</b>	Granted

## Test description

The MyMicrobiome Standard evaluates the influence of textiles and hygiene products on the microbial key players located at a specific skin or mucous membrane site.

An intact skin microbiome has a fundamental influence on skin health. Skin-friendly products must also be microbiome-friendly and ensure the maintenance of the balance among the skin 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 skin area and thus offers a standardized procedure.

## Various aspects are examined:

### The microbial quality of the product.

The quality test ensures that the textile products are sterile so that our microbiological tests can be carried out with the skin microorganisms. Therefore, textiles are washed according to the manufacturers' instructions beforehand. A screening examines the occurrence of mesophilic and aerobic microorganisms. For decontamination, the products are UV-irradiated or autoclaved. Hygiene products are sterilized through UV light exposure, if necessary.

### The influence of the product on natural, healthy skin.

The skin-commensal bacterium *Staphylococcus epidermidis* produces antimicrobial peptides (so-called bacteriocins) and regulates skin pH, which keeps skin-harmful microorganisms, such as *Staphylococcus aureus* in check. The product should not disturb the balance between skin-friendly and skin-harmful bacteria. This sensitive balance is investigated in conjunction with the product.

### 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 skin, it is particularly important to maintain this biodiversity. The influence of the product on the respective microbial composition 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 are brought into direct 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

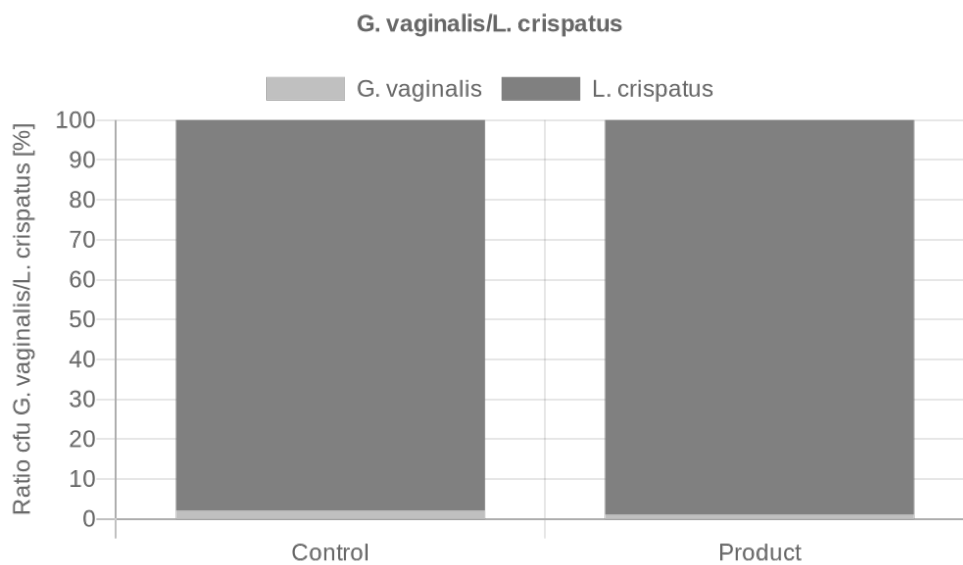
Parameter	Sample no.: 25.T030.45.1
TAMC and TYMC [cfu/0,1 ml]	< 20

The microbiological quality of the product is fulfilled.

## Results

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

A co-culture of *S. epidermidis* and *S. aureus* is incubated with the product for 4 h. Bacterial counts are determined, the ratio of the two microbes to each other is assessed and compared to the control sample (no product).

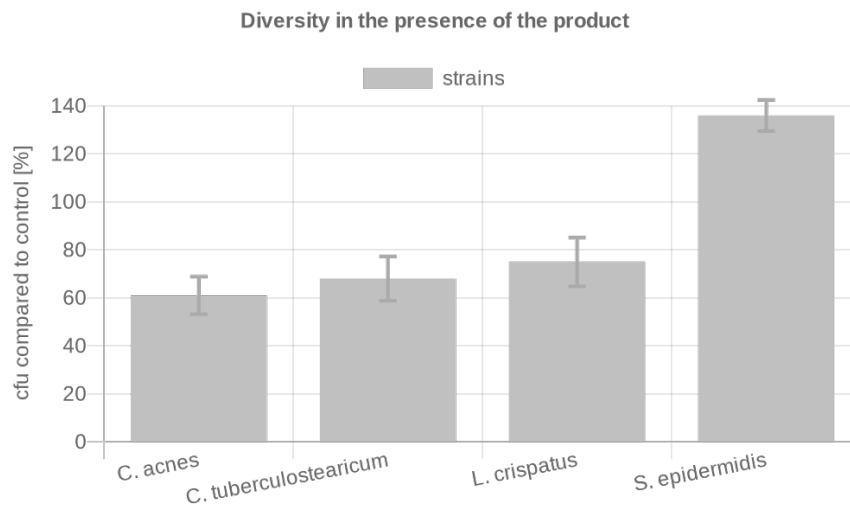


	cfu/ml		Ratio Product/ Control	Grade
	<i>G. vaginalis</i>	<i>L. crispatus</i>		
<b>Control</b>	1100	59866.7	3.4	<b>1.0</b>
<b>Product</b>	333.3	62533.3		

## Results

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

A co-culture of key organisms of the specific body region is incubated with the product for 15 min (rinse-off) or 4h (leave-on). Bacterial colonies are counted, and the ratio of the cfu in the presence of the product compared to the control (PBS) is determined.

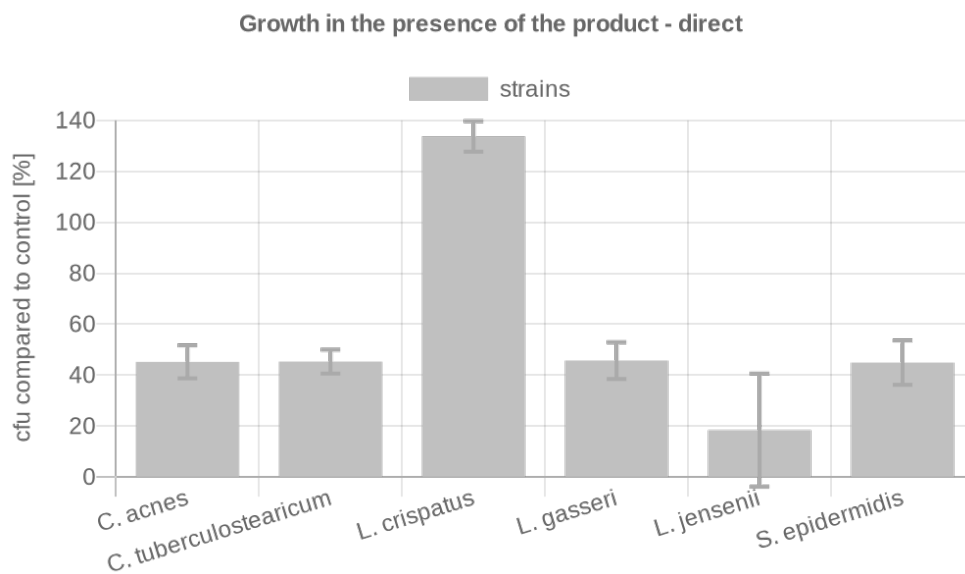


Key-Microbe	t=	4 h	Rating
	cfu/ml		
<i>C. acnes</i>	Control	240	2
	Product	146.7	
<i>C. tuberculostearicum</i>	Control	93.3	2
	Product	63.3	
<i>L. crispatus</i>	Control	690	2
	Product	520	
<i>S. epidermidis</i>	Control	1303.3	1
	Product	1773.3	
<b>Overall rating:</b>			<b>1.8</b>

## Results

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

The influence of the product on the growth of each individual key organism of the specific body region is investigated. Each species of microorganism is put in contact with the product for 4 h. The ratio of the cfu in the presence of the product is calculated in % relative to the control sample (no product).



Key-Microbe	cfu/ml		Rating
<i>C. acnes</i>	Control	359.3	3
	Product	162.3	
<i>C. tuberculoostearicum</i>	Control	117.7	3
	Product	53.3	
<i>L. crispatus</i>	Control	344.3	1
	Product	460.3	
<i>L. gasseri</i>	Control	136.3	3
	Product	62.3	
<i>L. jensenii</i>	Control	14.7	3
	Product	2.7	
<i>S. epidermidis</i>	Control	97.3	3
	Product	43.7	
<b>Overall rating:</b>			<b>2.7</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 skin microbiome	1.0
Diversity of the skin microbiome (x2)	1.8
Vitality of the skin microbiome (x2)	2.7
<b>Overall grade</b>	<b>2.0</b>

**With an overall grade of 2.0 the seal „Microbiome-friendly“ is awarded according to MyMicrobiome Standard 45.10 Vulvo-Vaginal.**

Place, Date: Balzers, 05 March 2025

Responsible person: Dr. Kristin Neumann

Signature:

