

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

Information about the tested product:

Manufacturer:

AAK Sweden AB
Pulpegatan 20
SE 215 37 Malmö
Sweden

Name of the product:

LIPEX® Shea

Product type:	Ingredient
Application:	Leave-on
Dilution:	No
Sample received:	21 January 2025
Test Start:	13 February 2025
Test End:	26 June 2025
Test Standard:	MyMicrobiome Standard 18.11 Face / Body
Test result:	1.4
Certification:	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 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.

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 skin balance.

The skin-commensal bacterium *Staphylococcus epidermidis* produces antimicrobial peptides (so-called bacteriocins) and regulates skin pH, which keeps harmful microorganisms such as *Staphylococcus aureus* in check. The product should not disturb the balance between friendly and 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 microbiome, 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 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
Total aerobic microbial count (TAMC) and total combined yeasts/ moulds count (TYMC)	≤ 20 cfu*/g or ml

* colony forming units (cfu)

Results microbiological quality

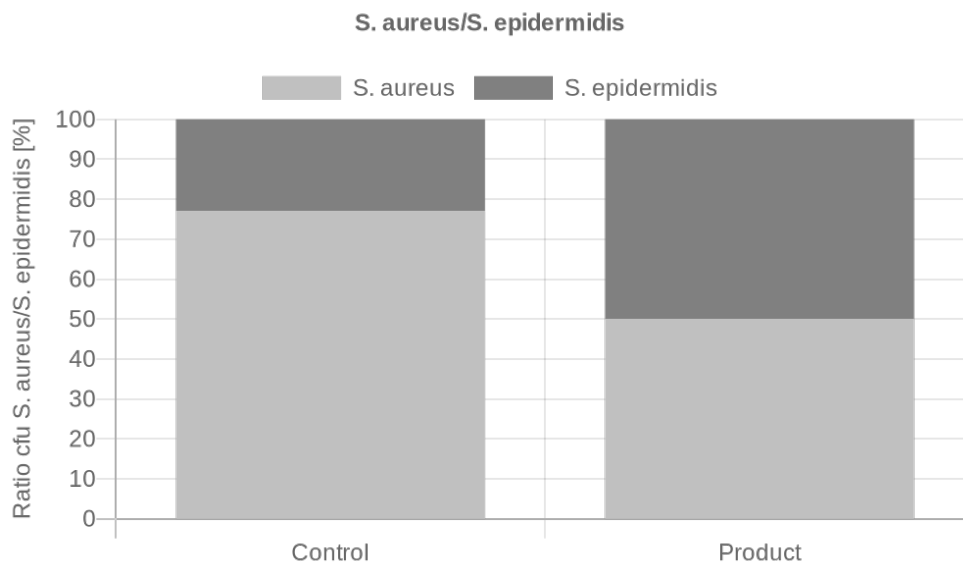
Parameter	Sample no.: 24.958.18.1
TAMC and TYMC [cfu/0,1 ml]	< 20

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 15 min (rinse-off) or 4h (leave-on). Bacterial counts are determined, the ratio of the two microbes to each other is assessed and compared to the control sample (PBS).

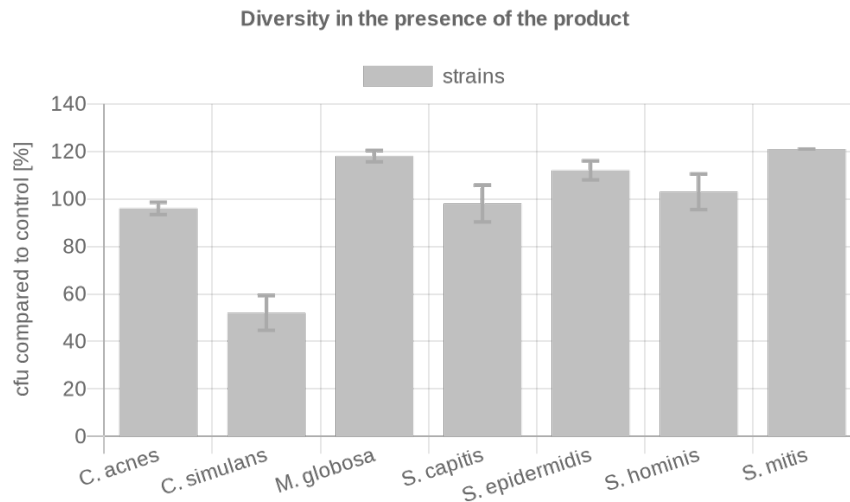


	cfu/ml		Ratio Product/ Control	Grade
	<i>S. aureus</i>	<i>S. epidermidis</i>		
Control	2126.7	646.7	3.3	1.0
Product	840	850		

Results – SEBACEOUS SKIN –

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.

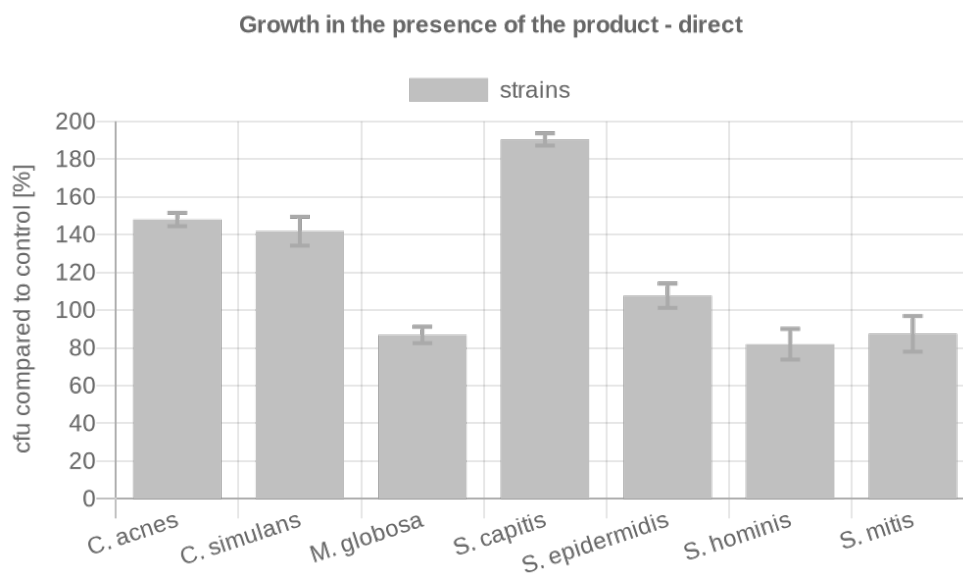


Key-Microbe	t=	4h	Rating
	cfu/ml		
<i>C. acnes</i>	Control	560	1
	Product	540	
<i>C. simulans</i>	Control	750	3
	Product	390	
<i>M. globosa confluence</i>	Control	9900	1
	Product	11700	
<i>S. capitis</i>	Control	3660	1
	Product	3575	
<i>S. epidermidis</i>	Control	2040	1
	Product	2285	
<i>S. hominis</i>	Control	730	1
	Product	750	
<i>S. mitis</i>	Control	296.7	1
	Product	360	
Overall rating:			1.3

Results – SEBACEOUS SKIN –

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 specific body region is investigated and the ratio of the cfu in the presence of the product is calculated in % relative to the control sample (PBS). Product contact with microorganisms is direct.

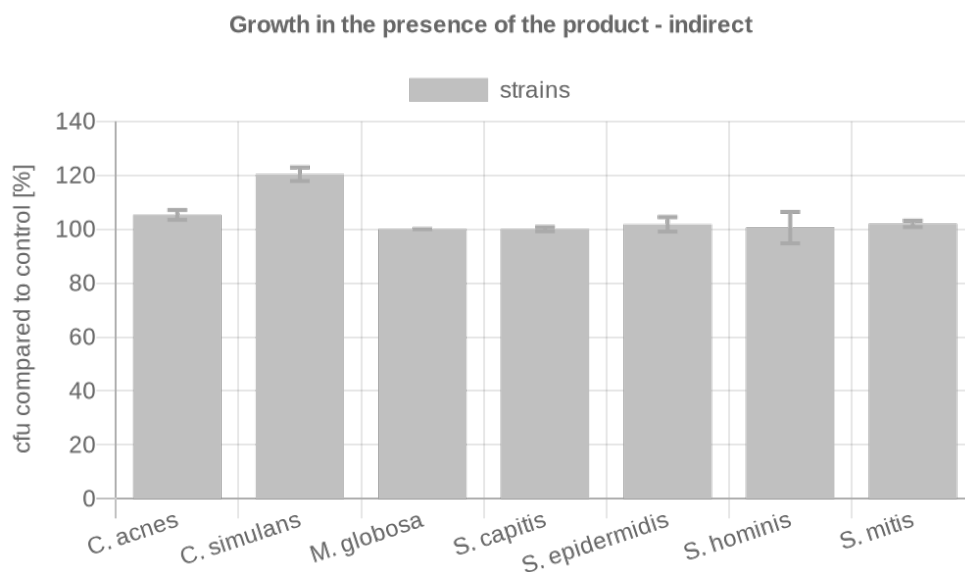


Key-Microbe	cfu/ml		Rating
<i>C. acnes</i>	Control	370.3	2
	Product	548	
<i>C. simulans</i>	Control	78.3	2
	Product	111	
<i>M. globosa</i>	Control	951.7	2
	Product	825.7	
<i>S. capitis</i>	Control	179.3	3
	Product	341.3	
<i>S. epidermidis</i>	Control	684	1
	Product	736	
<i>S. hominis</i>	Control	511.3	2
	Product	418.7	
<i>S. mitis</i>	Control	270	2
	Product	236	
Overall rating:			2.0

Results – SEBACEOUS SKIN –

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 specific body region is investigated and the ratio of the cfu in the presence of the product is calculated in % relative to the control sample (PBS). Product contact with microorganisms is indirect.

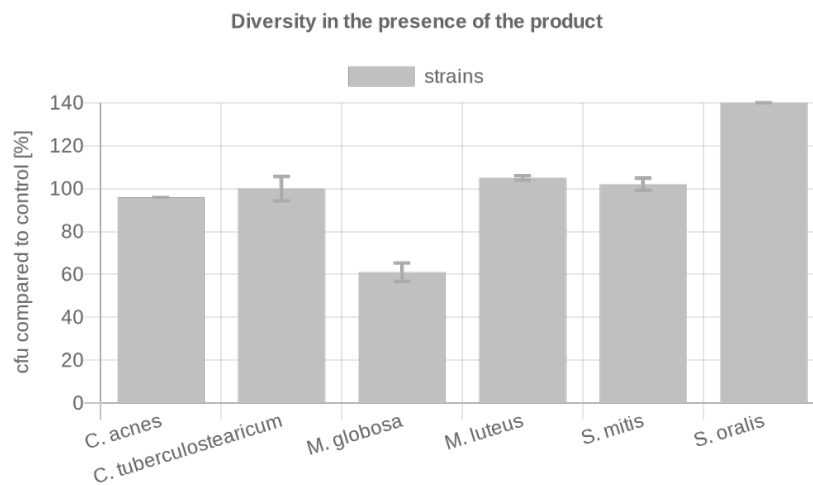


Key-Microbe	cfu/ml		Rating
C. acnes	Control	188	1
	Product	198	
C. simulans	Control	286.3	1
	Product	344.7	
M. globosa	Control	100	1
	Product	100	
S. capitis	Control	361	1
	Product	361	
S. epidermidis	Control	388	1
	Product	395	
S. hominis	Control	364	1
	Product	366.3	
S. mitis	Control	49.3	1
	Product	50.3	
Overall rating:			1.0

Results – DRY SKIN –

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 t = 15 min (rinse-off) or 4h (leave-on). The ratio of the microbes compared to the control (PBS) is determined.



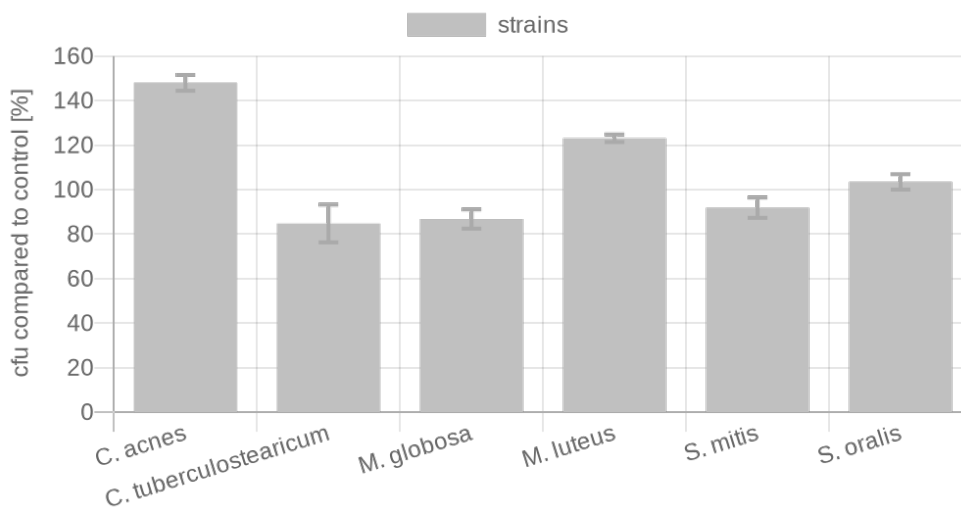
Key-Microbe	t=	4h	Rating
	cfu/ml		
<i>C. acnes</i>	Control	570	1
	Product	550	
<i>C. tuberculostearicum</i>	Control	125	1
	Product	125	
<i>M. globosa confluence</i>	Control	54133,3	3
	Product	32900	
<i>M. luteus</i>	Control	650	1
	Product	685	
<i>S. mitis</i>	Control	490	1
	Product	500	
<i>S. oralis</i>	Control	206,7	1
	Product	290	
Overall rating:			1.3

Results – DRY SKIN –

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 specific body region is investigated and the ratio of the cfu in the presence of the product is calculated in % relative to the control sample (PBS). Product contact with microorganisms is direct.

Growth in the presence of the product - direct

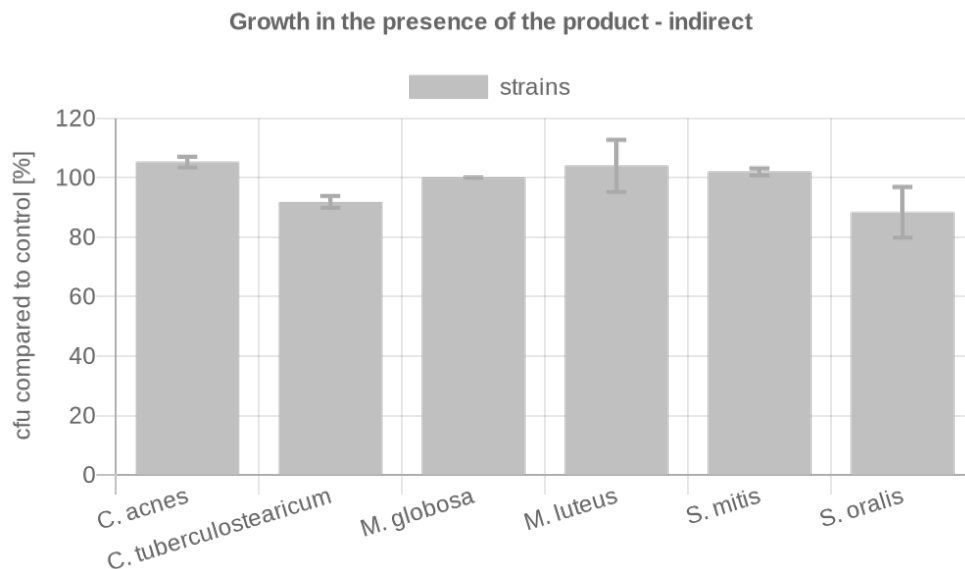


Key-Microbe	cfu/ml		Rating
C. acnes	Control	370.3	2
	Product	548	
C. tuberculostearicum	Control	926	2
	Product	785.7	
M. globosa	Control	951.7	2
	Product	825.7	
M. luteus	Control	273	1
	Product	336	
S. mitis	Control	270	2
	Product	248	
S. oralis	Control	1507.3	1
	Product	1560.3	
Overall rating:			1.7

Results – DRY SKIN –

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 specific body region is investigated and the ratio of the cfu in the presence of the product is calculated in % relative to the control sample (PBS). Product contact with microorganisms is indirect.



Key-Microbe	cfu/ml		Rating
C. acnes	Control	188	1
	Product	198	
C. tuberculostearicum	Control	1879.3	2
	Product	1728	
M. globosa confluence	Control	100	1
	Product	100	
M. luteus	Control	62.5	1
	Product	65	
S. mitis	Control	49.3	1
	Product	50.3	
S. oralis	Control	351.7	2
	Product	311	
Overall rating:			1.3

Results

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

The product has passed if it obtains an overall grade 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 corresponding skin microbiome (sebaceous, x2)	1.3
Diversity of the corresponding skin microbiome (dry, x2)	1.3
Skin-product contact direct (sebaceous, x2)	2.0
Skin-product contact direct (dry, x2)	1.7
Skin-product contact indirect (sebaceous)	1.0
Skin-product contact indirect (dry)	1.3
Overall grade	1.4

With an overall grade of 1.4 the seal „Microbiome-friendly“ is awarded according to MyMicrobiome Standard 18.11 Face / Body.

Place, Date: Hauptwil, 26 June 2025

Responsible person: Dr. Kristin Neumann

Signature:

