



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

Information about the tested product:

Manufacturer:

Codex Beauty Corporation
1900 Camden Avenue, Suite 101
San Jose, CA 95124
United States of America



Name of the product:

CODEX BEAUTY LABS - Antü Refreshing Soap, conc. 50 mg/ml (w/v)

Product class:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Face / Eyes
MyMicrobiome Standard 18.10 | <input type="checkbox"/> Scalp
MyMicrobiome Standard 19.10 |
| <input checked="" type="checkbox"/> Lips
MyMicrobiome Standard 18.10 | <input type="checkbox"/> Infant skin
MyMicrobiome Standard 20.10 |
| <input checked="" type="checkbox"/> Body / Neck / Chest / Hands
MyMicrobiome Standard 18.10 | <input type="checkbox"/> Vaginal tract
MyMicrobiome Standard 21.10 |
| <input checked="" type="checkbox"/> Back
MyMicrobiome Standard 18.10 | <input type="checkbox"/> Feet
MyMicrobiome Standard 22.10 |
| <input checked="" type="checkbox"/> Bottom / Thighs
MyMicrobiome Standard 18.10 | <input type="checkbox"/> Mouth
MyMicrobiome Standard 23.10 |
| <input type="checkbox"/> Auxiliary vault
MyMicrobiome Standard 18.10 | <input type="checkbox"/> Nasal mucosa
MyMicrobiome Standard 24.10 |

Sample receipt: September 07, 2021
Test date/period: September 09 - 20, 2021

Test result: 1.8
Approved yes/no: yes; September 20th 2021



Test description

The MyMicrobiome Standard evaluates cosmetic and personal care products, that encounter the skin or mucous membrane, in terms of their influence on the microbiome located at a specific body site.

An intact skin microbiome has a fundamental influence on skin health. Products which are to be skin-friendly must also be Microbiome-friendly in order not to unbalance the skin of the user.

The MyMicrobiome Standard evaluates the influence of cosmetic and personal care products on the microbial key players of a specific skin or mucous membrane area. The human microbiome is very individual from person to person.

Each area, however, harbors a characteristic composition of bacteria, viruses and fungi. The test examines the products 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 influence of the product on the bacterial diversity of the specific body region.

Each body region is colonized by a certain microbial composition. For a healthy skin it is particularly important to maintain this biodiversity. The influence of the product on the respective microbial mixture 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 specific microbiome, the growth or number of different key organisms should not be influenced by the product. This is investigated in a skin-product contact model. The key organisms are brought into **direct** and **indirect** contact with the product and their growth is observed.





Results

The microbial quality of the product.

The prerequisite for the test for microbial friendliness is the microbiological quality of the product. The following table contains the limit values that must be observed.

Types of organisms	Limit values	
	Products specially designed for children under 3 years, eye area or mucous-skins	Other products
Total counts mesophilic, aerobic microorganisms (bacteria, yeasts, molds, (TAMC and TYMC))	$\leq 1 \times 10^2$ cfu/g or ml ^a	$\leq 1 \times 10^3$ cfu/g or ml ^b
<i>Escherichia coli</i>	Not detectable in 1g or 1 ml	Not detectable in 1g or 1 ml
<i>Pseudomonas aeruginosa</i>	Not detectable in 1g or 1 ml	Not detectable in 1g or 1 ml
<i>Staphylococcus aureus</i>	Not detectable in 1g or 1 ml	Not detectable in 1g or 1 ml
<i>Candida albicans</i>	Not detectable in 1g or 1 ml	Not detectable in 1g or 1 ml

a >200 cfu/g or ml, b >2000 cfu/g or ml

Results Microbiological quality:

Determination of TAMC, TYMC, absence of *E. coli*, *P. aeruginosa* and *S. aureus*.

Parameter	Sample no.: 210.907.2
TAMC [cfu/0,1 ml]	< 1,0E+01
TYMC (incl. <i>Candida albicans</i>) [in 0,1 ml]	negative
<i>Escherichia coli</i> [in 0,1 ml]	negative
<i>Pseudomonas aeruginosa</i> [in 0,1 ml]	negative
<i>Staphylococcus aureus</i> [in 0,1 ml]	negative

The microbiological quality of the product according to DIN EN ISO 17516 is fulfilled.

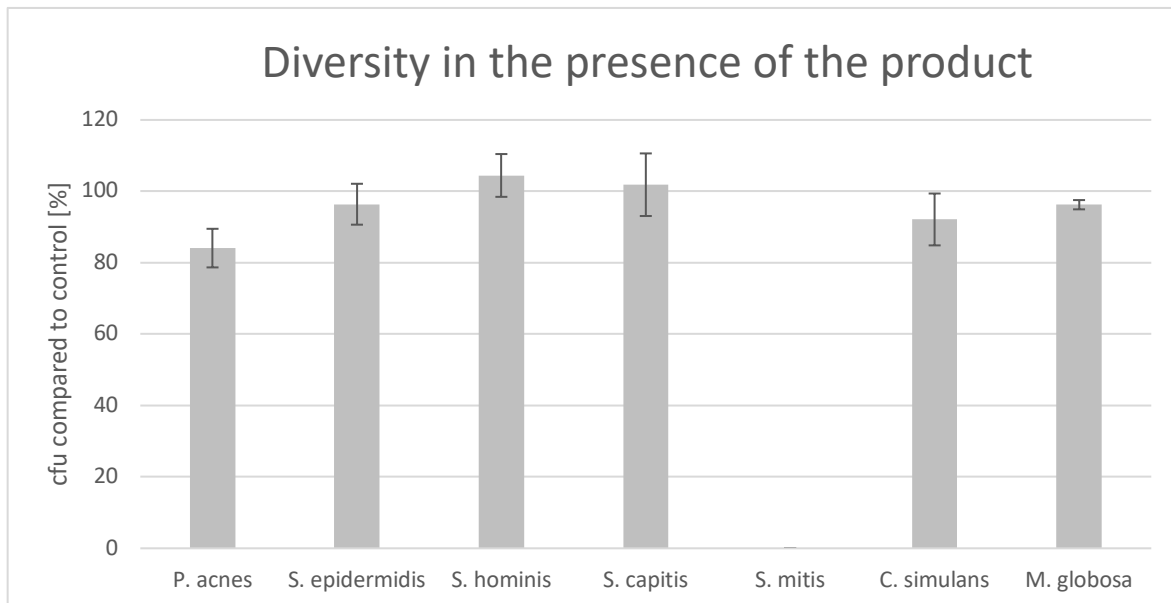




Results - SEBACEOUS SKIN -

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. The ratio of the bacteria compared to the control (PBS) is determined.



Key-Microbe	t=	15 min	Rating
	cfu/ml		
<i>P. acnes</i>	Control	3.5E+03	2
	Product	2.9E+03	
<i>S. epidermidis</i>	Control	2.8E+02	1
	Product	2.7E+02	
<i>S. hominis</i>	Control	1.1E+03	1
	Product	1.1E+03	
<i>S. capitis</i>	Control	3.6E+02	1
	Product	3.7E+02	
<i>S. mitis</i>	Control	3.7E+03	3
	Product	0.0E+00	
<i>C. simulans</i>	Control	1.2E+03	1
	Product	1.1E+03	
<i>M. globosa</i>	Control	8.0E+02	1
	Product	7.7E+02	
Overall rating:			1.4

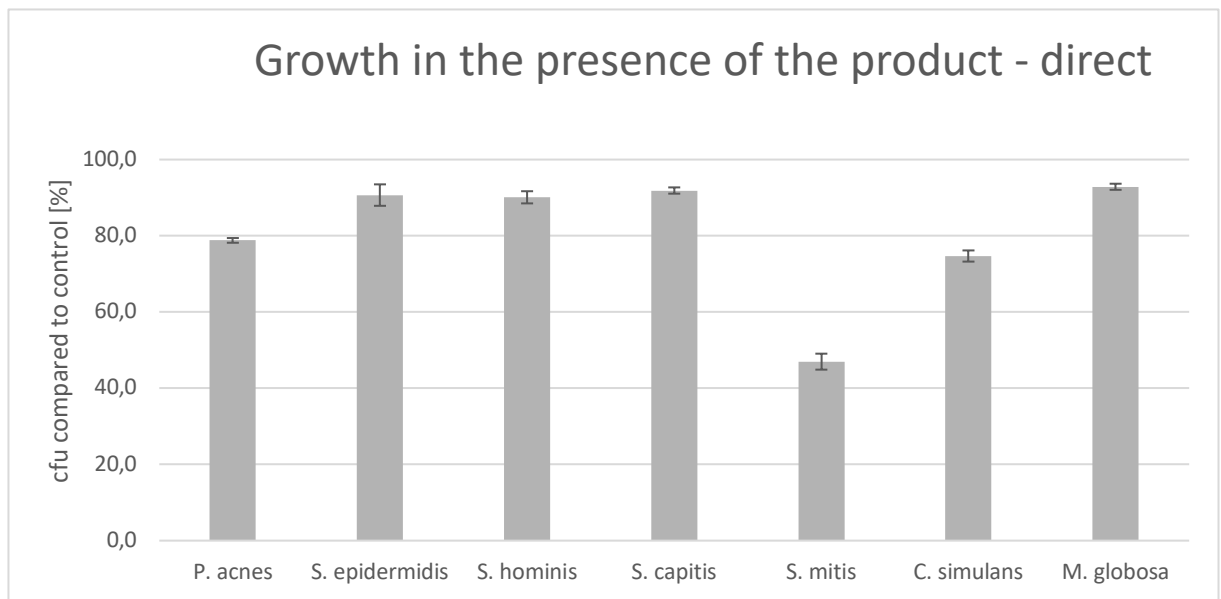




Results - SEBACEOUS SKIN -

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

The influence of the product on the growth of each individual microbe of the key organisms of the specific body region is investigated and put in relation to the control (PBS). Product contact with the microorganisms is directly.



Key-Microbe	cfu /Plate		Rating
<i>P. acnes</i>	Control	1250.7	2
	Product	985.3	
<i>S. epidermidis</i>	Control	414.7	2
	Product	376.0	
<i>S. hominis</i>	Control	578.7	2
	Product	521.3	
<i>S. capitis</i>	Control	918.7	2
	Product	844.0	
<i>S. mitis</i>	Control	1428.0	3
	Product	670.7	
<i>C. simulans</i>	Control	1174.7	2
	Product	877.3	
<i>M. globosa</i>	Control	821.3	2
	Product	762.7	
Overall rating:			2.1

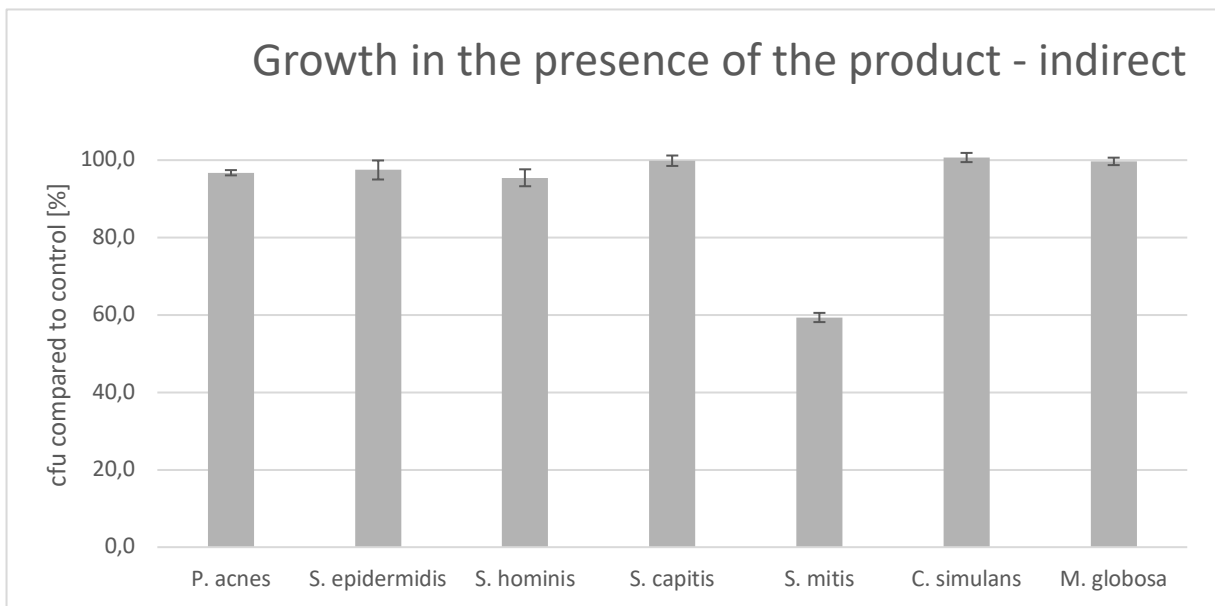




Results - SEBACEOUS SKIN -

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 microbe of the key organisms of the specific body region is investigated and put in relation to the control (PBS). The product contact to the microorganisms is indirect.



Key-Microbe	cfu /Plate		Rating
	Control	Product	
<i>P. acnes</i>	Control	1270.7	1
	Product	1229.3	
<i>S. epidermidis</i>	Control	420.0	1
	Product	409.3	
<i>S. hominis</i>	Control	585.3	1
	Product	558.7	
<i>S. capitis</i>	Control	893.3	1
	Product	892.0	
<i>S. mitis</i>	Control	1426.7	3
	Product	846.7	
<i>C. simulans</i>	Control	1173.3	1
	Product	1181.3	
<i>M. globosa</i>	Control	834.7	1
	Product	832.0	
Overall rating:			1.3

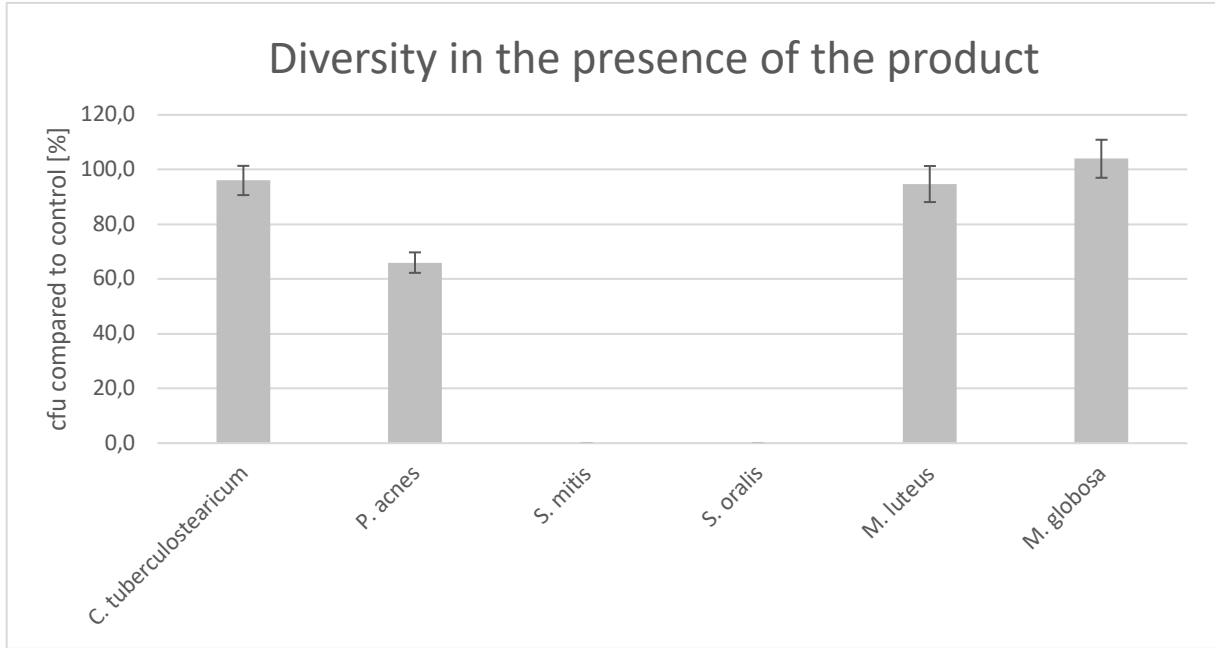




Results - DRY SKIN -

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 15 min. The ratio of the bacteria compared to the control (PBS) is determined.



Key-Microbe	t=	15 min	Rating
	cfu/ml		
<i>C. tuberculostearicum</i>	Control	2.1E+03	1.0
	Product	2.1E+03	
<i>P. acnes</i>	Control	4.2E+03	2.0
	Product	2.7E+03	
<i>S. mitis</i>	Control	3.3E+03	3.0
	Product	0.0E+00	
<i>S. oralis</i>	Control	2.5E+03	3.0
	Product	0.0E+00	
<i>M. luteus</i>	Control	8.8E+02	1.0
	Product	8.4E+02	
<i>M. globosa</i>	Control	1.0E+03	1.0
	Product	1.1E+03	
Overall rating:			1.8

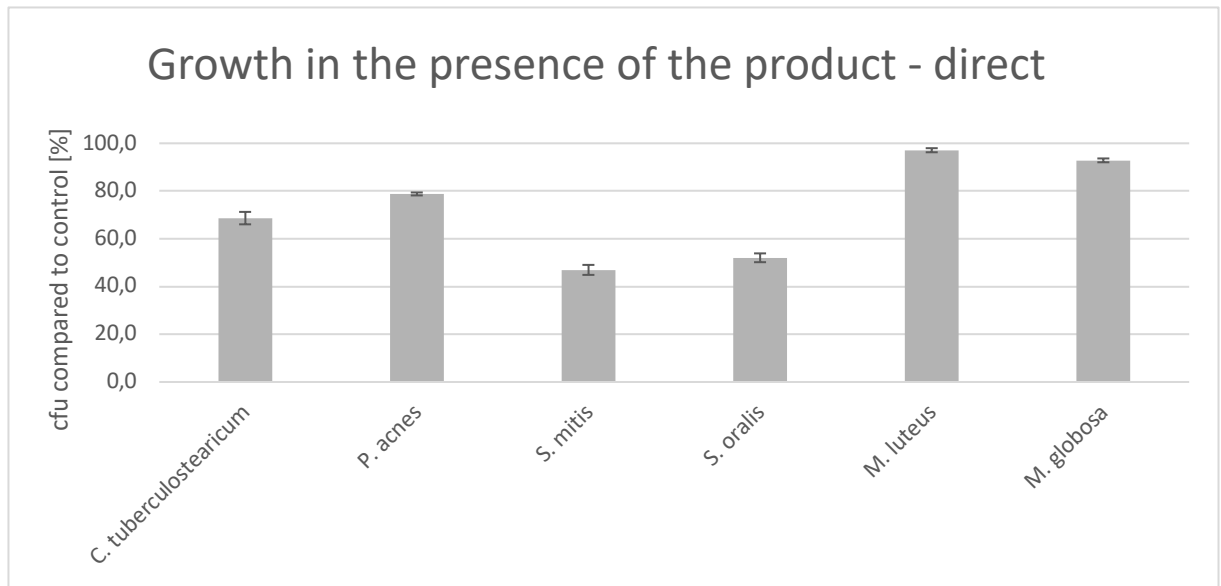




Results - DRY SKIN -

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

The influence of the product on the growth of each individual microbe of the key organisms of the specific body region is investigated and put in relation to the control (PBS). Product contact with the microorganisms is directly.



Key-Microbe	cfu /Plate		Rating
<i>C. tuberculoostearicum</i>	Control	846.7	2
	Product	581.3	
<i>P. acnes</i>	Control	1250.7	2
	Product	985.3	
<i>S. mitis</i>	Control	1428.0	3
	Product	670.7	
<i>S. oralis</i>	Control	1048.0	3
	Product	545.3	
<i>M. luteus</i>	Control	736.0	1
	Product	714.7	
<i>M. globosa</i>	Control	821.3	2
	Product	762.7	
Overall rating:			2.2

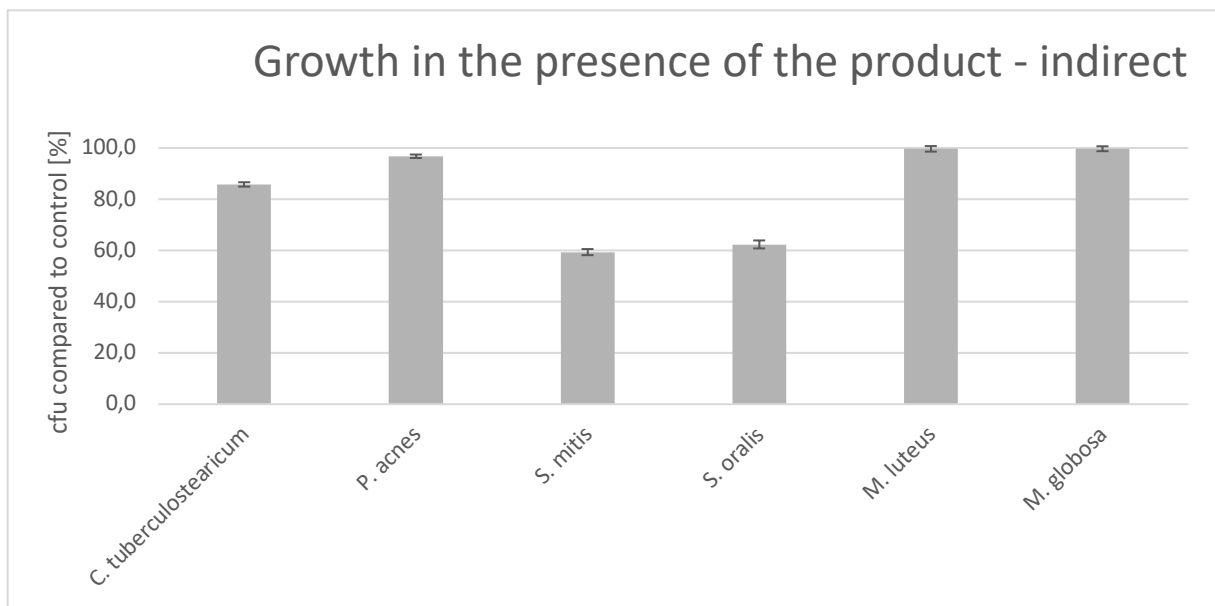




Results - DRY SKIN -

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 microbe of the key organisms of the specific body region is investigated and put in relation to the control (PBS). The product contact to the microorganisms is indirect.



Key-Microbe	cfu /Plate		Rating
<i>C. tuberculo-tearicum</i>	Control	842.7	2
	Product	722.7	
<i>P. acnes</i>	Control	1270.7	1
	Product	1229.3	
<i>S. mitis</i>	Control	1426.7	3
	Product	846.7	
<i>S. oralis</i>	Control	1037.3	3
	Product	646.7	
<i>M. luteus</i>	Control	742.7	1
	Product	740.0	
<i>M. globosa</i>	Control	834.7	1
	Product	832.0	
Overall rating:			1.8





Results

The results are evaluated with grades from 1 (one) to 3 (three). If the product shows no or positive influence to the above-mentioned aspects, a grade of 1 is awarded respectively.

If only a very weak negative influence can be detected in the tests, the grade 2 is awarded and in case of a clearly negative influence, the product receives the grade 3.

The product has passed up to grade 2.0.

Here the grade means

1.0 - 2.0 = Microbiome-friendly; 2.1 - 3.0 = Microbiome-damaging.

Test	Grade
Diversity of the corresponding skin microbiome (sebaceous, x2)	1.4
Diversity of the corresponding skin microbiome (dry, x2)	1.8
Skin-product contact direct (sebaceous, x2)	2.1
Skin-product contact direct (dry, x2)	2.2
Skin-product contact indirect (sebaceous)	1.3
Skin-product contact indirect (dry)	1.8
Overall grade	1.8

With an overall grade of 1.8 the seal „Microbiome-friendly“ is awarded according to MyMicrobiome Standard 18.10.

Place, Date: Balzers, September 20th, 2021

Responsible person: Dr. Kristin Neumann

Signature:

