

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

Information about the tested product:

Manufacturer:

Dr. Reddy's Laboratories
8-2-337, Road No. 3
500 034 Banjara Hills, Hyderabad
India

Name of the product:

Venusia Max intense moisturizing lotion

Product type:	Final product
Application:	Leave-on
Dilution:	No
Sample received:	22 January 2024
Test Start:	22 January 2024
Test End:	20 February 2024
Test Standard:	MyMicrobiome Standard 18.11 Face / Body
Test result:	2.0
Certification:	granted

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 natural, healthy skin balance.

The skin-commensal bacterium *Staphylococcus epidermidis* keeps the skin with antimicrobial peptides (so-called bacteriocins) and pH adjustments healthy and keeps skin-harmful germs such as *Staphylococcus aureus* in check. The product should not disturb this 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 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*.

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

Parameter	Sample no.: 24.830.18.1
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

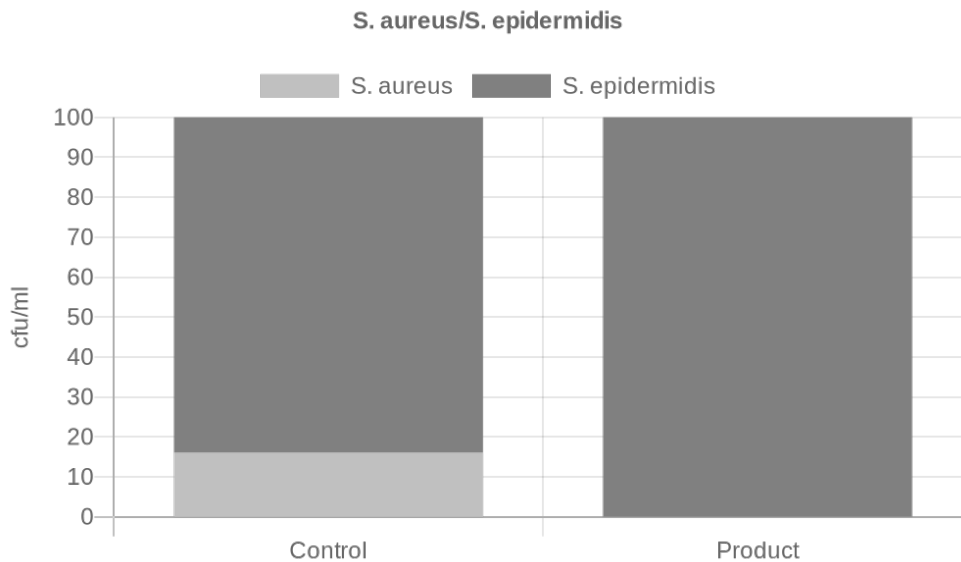
Results

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.

The ratio of the two microbes to each other is determined.

Determination of the bacterial count at time $t = 15$ min (rinse-off) or 4h (leave-on).

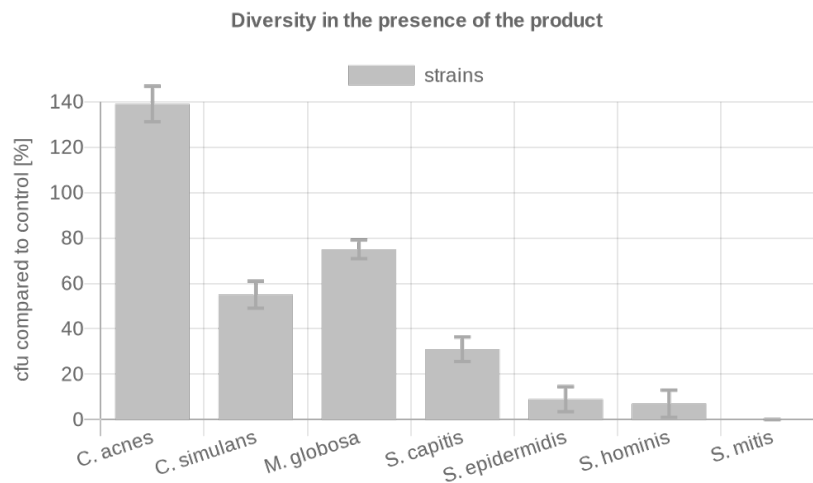


	cfu/ml		Ratio Product/ Control	Grade
	<i>S. aureus</i>	<i>S. epidermidis</i>		
Control	11600	59400	79	1
Product	16.7	6756.7		

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

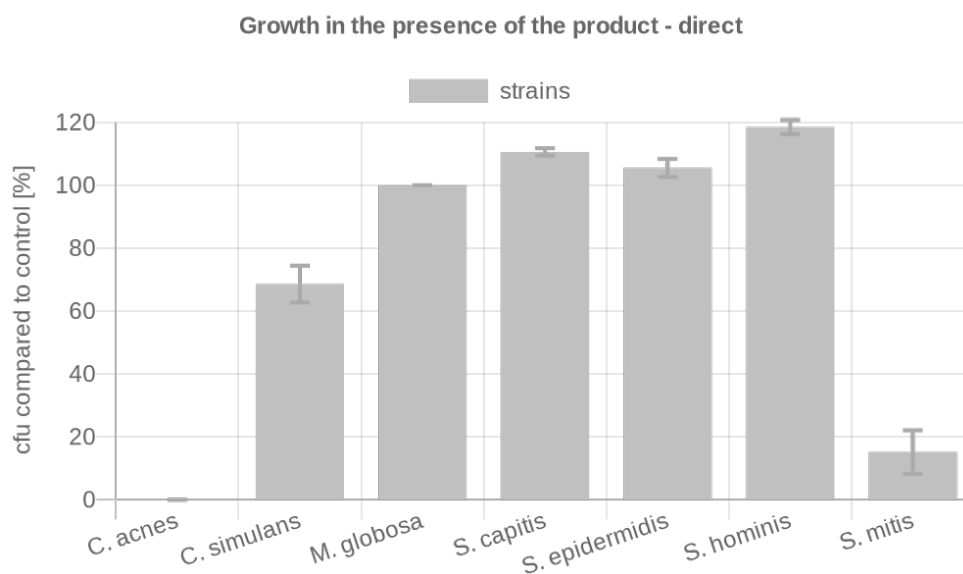


Key-Microbe	t=	4h	Rating
	cfu/ml		
C. acnes	Control	456.7	2
	Product	635	
C. simulans	Control	4400	3
	Product	2400	
M. globosa confluence	Control	47000	2
	Product	35200	
S. capitis	Control	1566.7	3
	Product	490	
S. epidermidis	Control	8133.3	3
	Product	770	
S. hominis	Control	3600	3
	Product	253.3	
S. mitis	Control	1626.7	3
	Product	0	
Overall rating:			2.7

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.

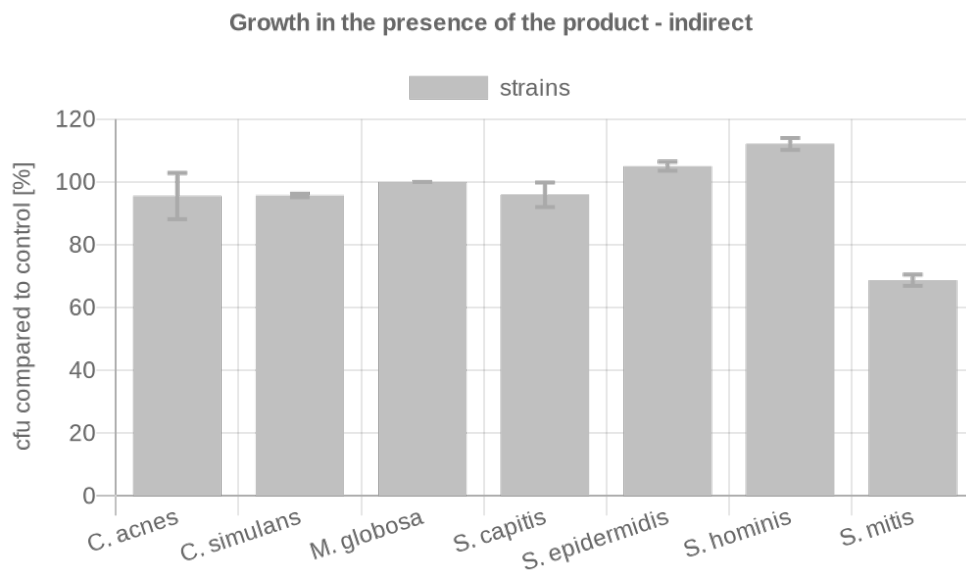


Key-Microbe	cfu/ml		Rating
	Control	Product	
C. acnes	Control	295	3
	Product	0	
C. simulans	Control	648.7	2
	Product	445.3	
M. globosa confluence	Control	100	1
	Product	100	
S. capitis	Control	1606.7	1
	Product	1777	
S. epidermidis	Control	886.7	1
	Product	935.3	
S. hominis	Control	368.7	1
	Product	437	
S. mitis	Control	1088	3
	Product	165	
Overall rating:			1.7

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.



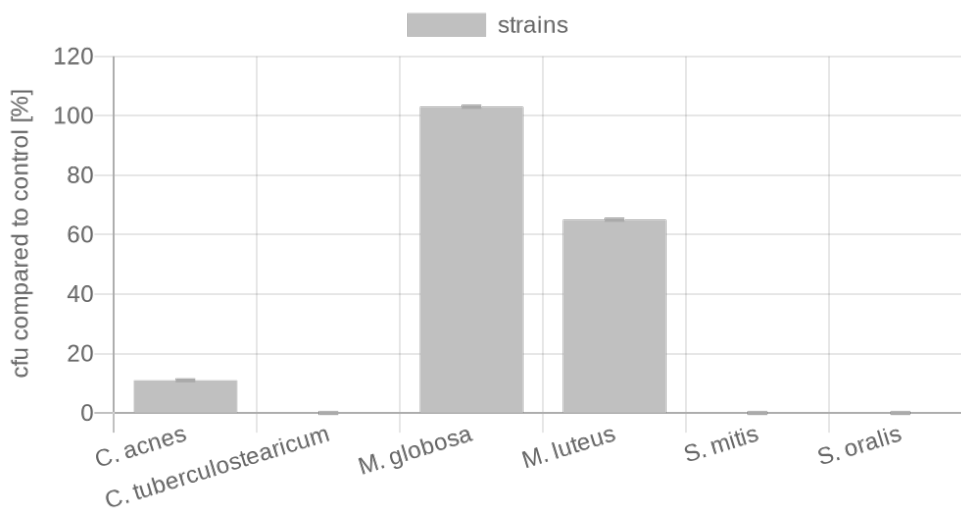
Key-Microbe	cfu/ml		Rating
C. acnes	Control	238.7	1
	Product	228	
C. simulans	Control	385	1
	Product	368.5	
M. globosa confluence	Control	100	1
	Product	100	
S. capitis	Control	1697	1
	Product	1626.7	
S. epidermidis	Control	860.7	1
	Product	903.7	
S. hominis	Control	381.7	1
	Product	427.7	
S. mitis	Control	920	2
	Product	632	
Overall rating:			1.1

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.

Diversity in the presence of the product



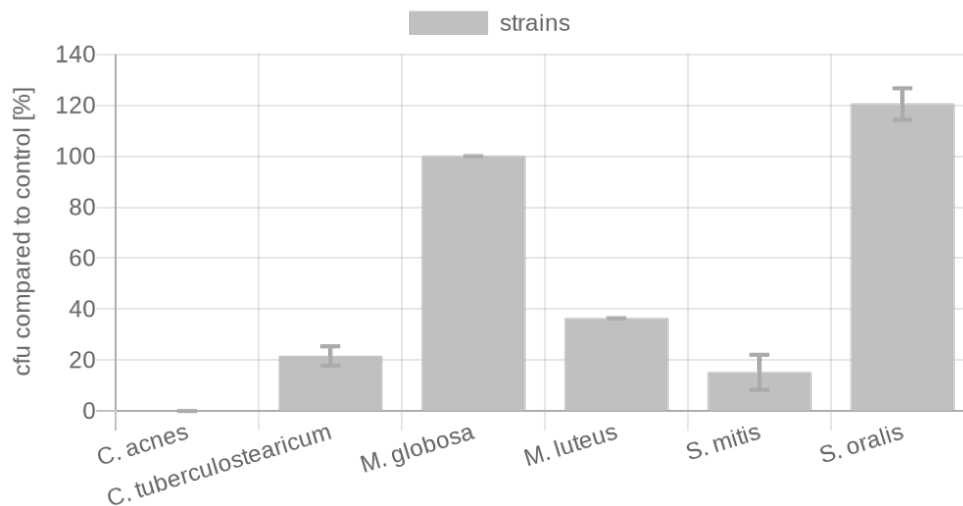
Key-Microbe	t=	4h	Rating
	cfu/ml		
C. acnes	Control	576,7	3
	Product	63,3	
C. tuberculoearicum	Control	146,7	3
	Product	0	
M. globosa confluence	Control	17633,3	1
	Product	18100	
M. luteus	Control	2533,3	2
	Product	1653,3	
S. mitis	Control	4266,7	3
	Product	0	
S. oralis	Control	57733,3	3
	Product	0	
Overall rating:			2.5

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.

Growth in the presence of the product - direct

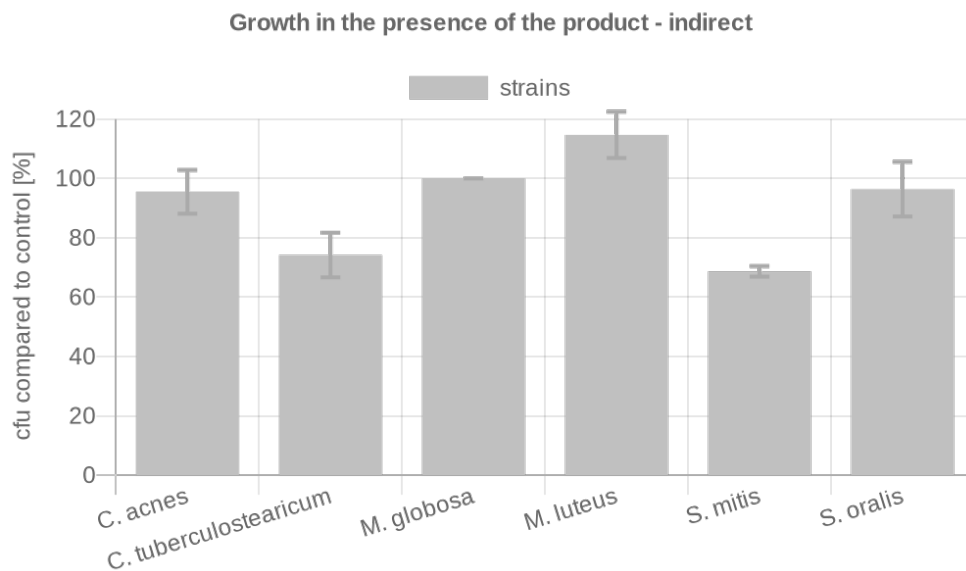


Key-Microbe	cfu/ml		Rating
	Control	Product	
C. acnes	Control	295	3
	Product	0	
C. tuberculostearicum	Control	1225.7	3
	Product	264.7	
M. globosa confluence	Control	100	1
	Product	100	
M. luteus	Control	206	3
	Product	75	
S. mitis	Control	1088	3
	Product	165	
S. oralis	Control	2331.7	1
	Product	2809.7	
Overall rating:			2.3

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/ml		Rating
<i>C. acnes</i>	Control	238.7	1
	Product	228	
<i>C. tuberculostearicum</i>	Control	878.3	2
	Product	651.7	
<i>M. globosa confluence</i>	Control	100	1
	Product	100	
<i>M. luteus</i>	Control	59.3	1
	Product	68	
<i>S. mitis</i>	Control	920	2
	Product	632	
<i>S. oralis</i>	Control	2676.3	1
	Product	2578.7	
Overall rating:			1.3

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-influencing

Test	Grade
Balance of the skin microbiome	1
Diversity of the corresponding skin microbiome (sebaceous, x2)	2.7
Diversity of the corresponding skin microbiome (dry, x2)	2.5
Skin-product contact direct (sebaceous, x2)	1.7
Skin-product contact direct (dry, x2)	2.3
Skin-product contact indirect (sebaceous)	1.1
Skin-product contact indirect (dry)	1.3
Overall grade	2.0

With an overall grade of 2.0 the seal „Microbiome-friendly“ is awarded according to MyMicrobiome Standard 18.11 Face / Body.

Place, Date: Balzers, 20 February 2024

Responsible person: Dr. Kristin Neumann

Signature:

