



Special  
chemicals

# SCH Blend<sup>®</sup> Well-Age

Actives for the skin



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# 01

## Introduction



# 01

## Introduction

Unveil radiant, age-defying skin with **SCH Blend® Well-Age**. This dynamic blend clarifies, moisturizes, fights inflammation, neutralizes free radicals, smooths wrinkles, enhances penetration, and brightens for a youthful glow.

## Main activities

- Clarifying and whitening
- Anti-inflammatory
- Reduces appearance of wrinkles
- Penetration enhancer
- Brightening
- Antioxidant

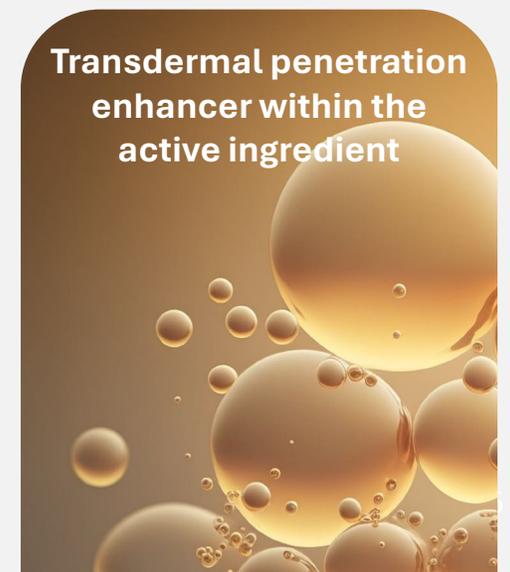


# 01 Composition

<b>INGREDIENT</b>	<b>%</b>	<b>FUNCTION</b>
Aqua	Up to 100	Solvent
Propanediol	40 – 50	Solvent
Polyglyceryl-6 caprylate	10 – 25	Solvent
Polyglyceryl-4 caprate	10 – 25	Solvent
<b>Potassium azeloyl diglycinate</b>	3 – 7	Active
<b>Tetrahydropiperine</b>	3 – 7	Active
<b>Glabridin</b>	0,1 – 0,5	Active
<b>Nonapeptide-1</b>	0,01 – 0,05	Active



Multiple antioxidant active components



Transdermal penetration enhancer within the active ingredient



# 02

## Ingredients





## 02 Ingredients

### 1. Potassium Azeloyl Diglycinate

Clarifying / Moisturizing / Anti-inflammatory

Potassium azeloyl diglycinate (PAD) is a condensed variant of **azelaic acid mixed with the aminoacid glycine**, which is safer and more effective than the free acid.

Its **clarifying properties** derive from its inhibitory effect on the tyrosinase in the melanogenic route of L-Dopachrome from Dopaquinone. The aminoacid glycine, an essential component of the natural moisturizing factor, **softens the skin and keeps it moist, providing hydration and brightness through a smoothing effect**. It also boosts the permeation and availability of the azelaic acid to the dermal-epidermal matrix.

PAD has **anti-inflammatory properties (IL-1 inhibition) and seborregulatory properties**, which help reinforce the clarifying and brightening effect (without shine) of the mixture.





## 02 Ingredients

### 2. Tetrahydropiperine

Penetration enhancer

Tetrahydropiperine (THP) is a derivative of piperine, a natural alkaloid extracted from black pepper.

THP is a **lipophilic transdermal penetration enhancer** that increases the bioavailability and diffusion of active ingredients. It boosts intercellular vehiculation through the stratum corneum, reducing the electrochemical resistance of intercorneocytic lipid bilayers. It also **improves the cosmeto-kinetics of active ingredients** in their intradermal diffusion process, by delaying their enzymatic degradation, activated by the cutaneous receptors of xenobiotics.



## 02 Ingredients

### 3. Glabridin

Clarifying/ Anti-inflammatory / Anti-free-radicals

Glabridin is an isoflavonoid extracted from licorice root that, due to its annular hydroxylic conformation (C6, C7 and C8), **promotes non-competitive inhibition of TRP-1 and TRP-2 tyrosinase activity** (irreversible inactivation). It also **regulates the signal of melanotropin ( $\alpha$ - MSH), the hormone responsible for activating the melanogenic process.**

Glabridin has a notable anti-inflammatory profile due to suppressing superoxide anion and inhibiting the signaling pathway of NF- $\kappa$ B and the expression of cyclooxygenase-2, **preventing the oxidative damage caused by UVB radiation.**





## 02 Ingredients

### 4. Nonapeptide-1

Clarifying

Nonapeptide-1 (NP-1) is a sophisticated **biomimetic peptide renowned for its remarkable affinity to cellular receptors associated with the melanoprotein MCI-R**, a pivotal player in melanin regulation. By precisely targeting these receptors, NP-1 exerts precise control over melanin synthesis, particularly by impeding the expression of tyrosinase isomorphous agents, which are essential to produce eumelanin.

Eumelanin is responsible for the darker pigmentation in the skin. Through this inhibition, **NP-1 effectively mitigates hyperpigmentation, age spots, and uneven skin tone**, leading to a visibly brighter and more uniform complexion.

This innovative peptide offers a tailored approach to skin pigmentation management, promoting a radiant, luminous appearance while addressing concerns related to melanin overproduction.



# 03

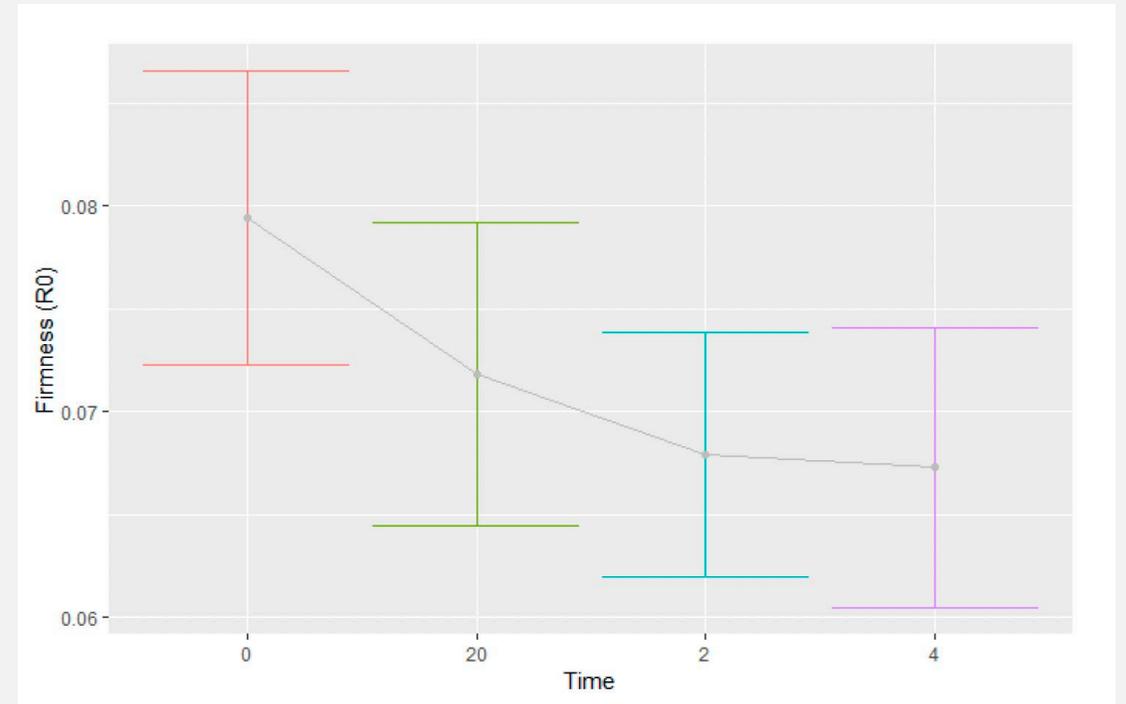
## Depigmenting efficacy test under dermatological control



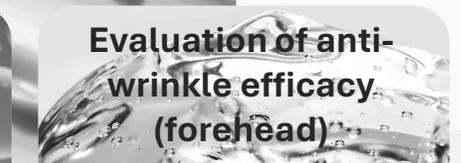
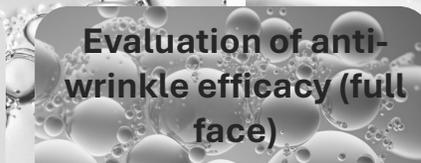
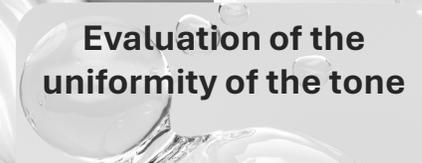
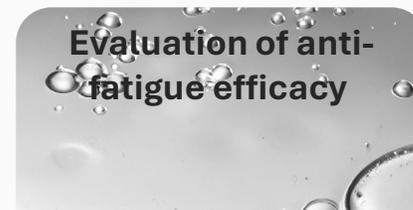
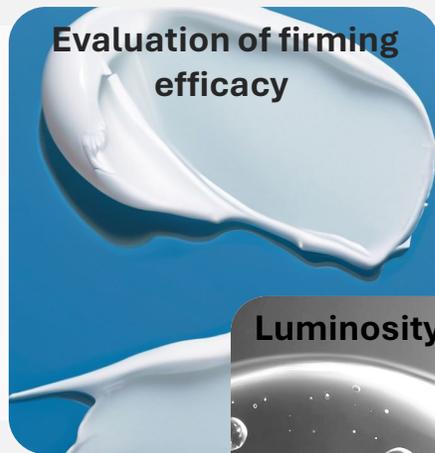
## 03 Dermatological efficacy evaluation

### Evaluation of firmness

→ After 4 hours, volunteers had a maximum decrease of 15,2% in the measurement with the Cutometer, showing an increase in the firmness of the skin.



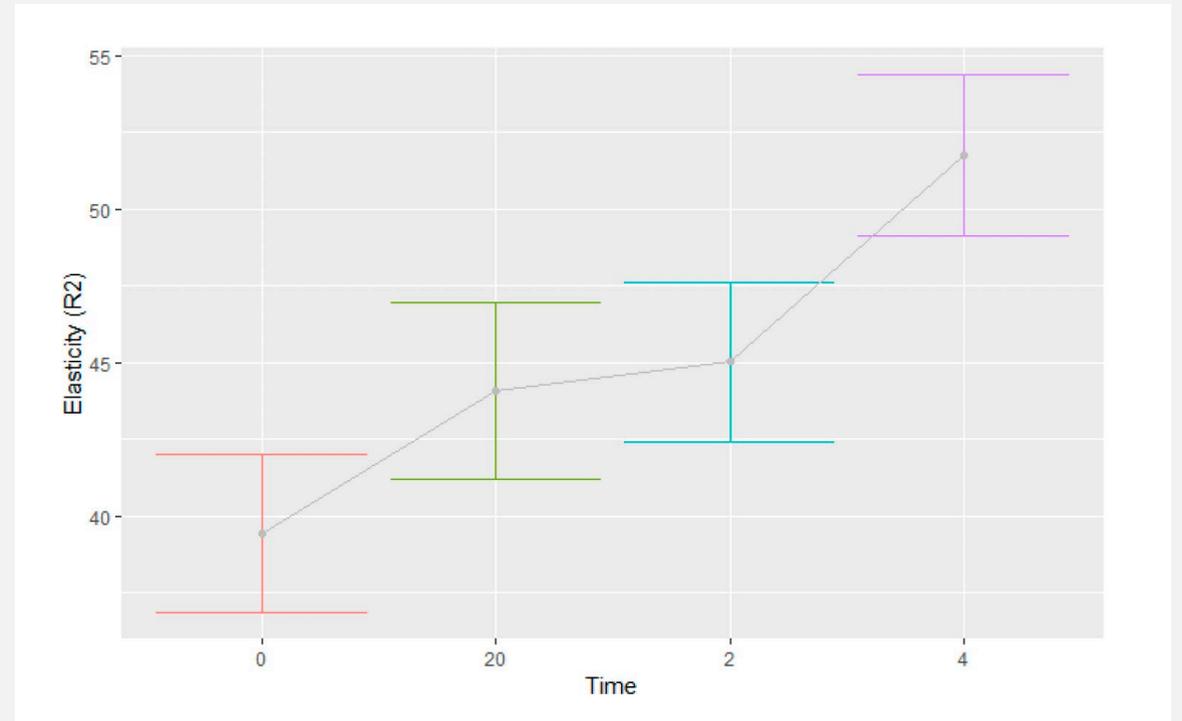
Average result of the parameter at different experimental times



### 03 Dermatological efficacy evaluation

#### Evaluation of the effectiveness in elasticity

→ After 4 hours, there is a statistically significant average increase of 31,2% when compared to T0, so the **elasticity improves**.



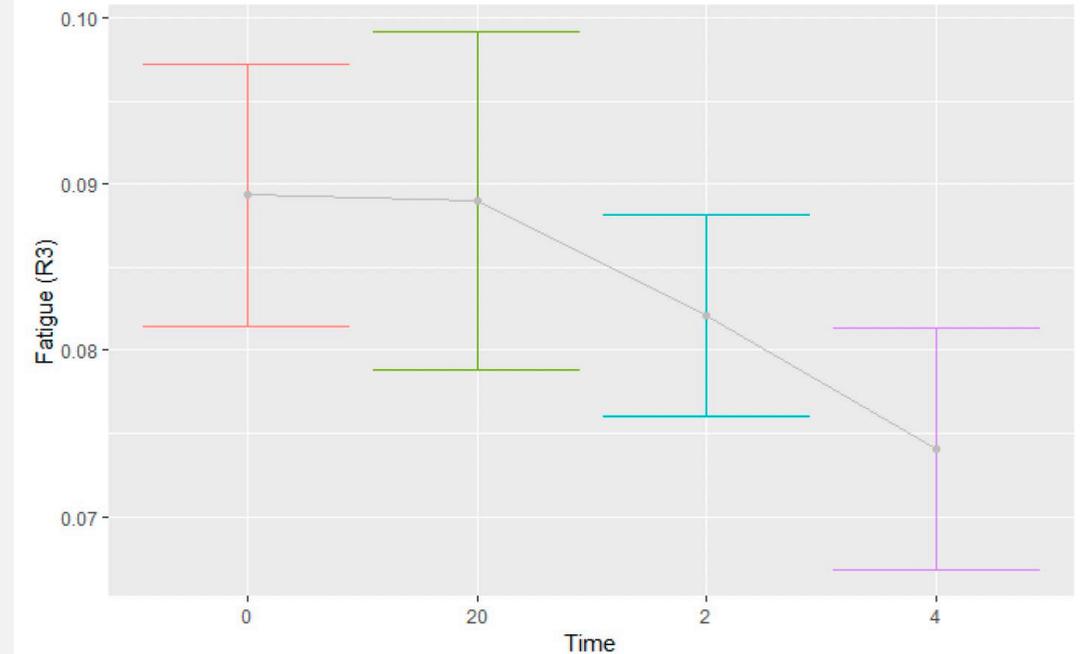
Average result of the parameter at different experimental times.

- Evaluation of firming efficacy
- Evaluation of the effectiveness in elasticity
- Evaluation of anti-fatigue efficacy
- Evaluation of moisturizing efficacy
- Luminosity evaluation
- Evaluation of the uniformity of the tone
- Evaluation of anti-wrinkle efficacy (full face)
- Evaluation of anti-wrinkle efficacy (forehead)

## 03 Dermatological efficacy evaluation

### Evaluation of anti-fatigue efficacy

→ After 4 hours, volunteers had a maximum decrease of 17% in the measurement when compared to T0, so the **fatigue improves**.



Average result of the parameter at different experimental times

Evaluation of firming efficacy

Evaluation of the effectiveness in elasticity

Evaluation of anti-fatigue efficacy

Evaluation of moisturizing efficacy

Luminosity evaluation

Evaluation of the uniformity of the tone

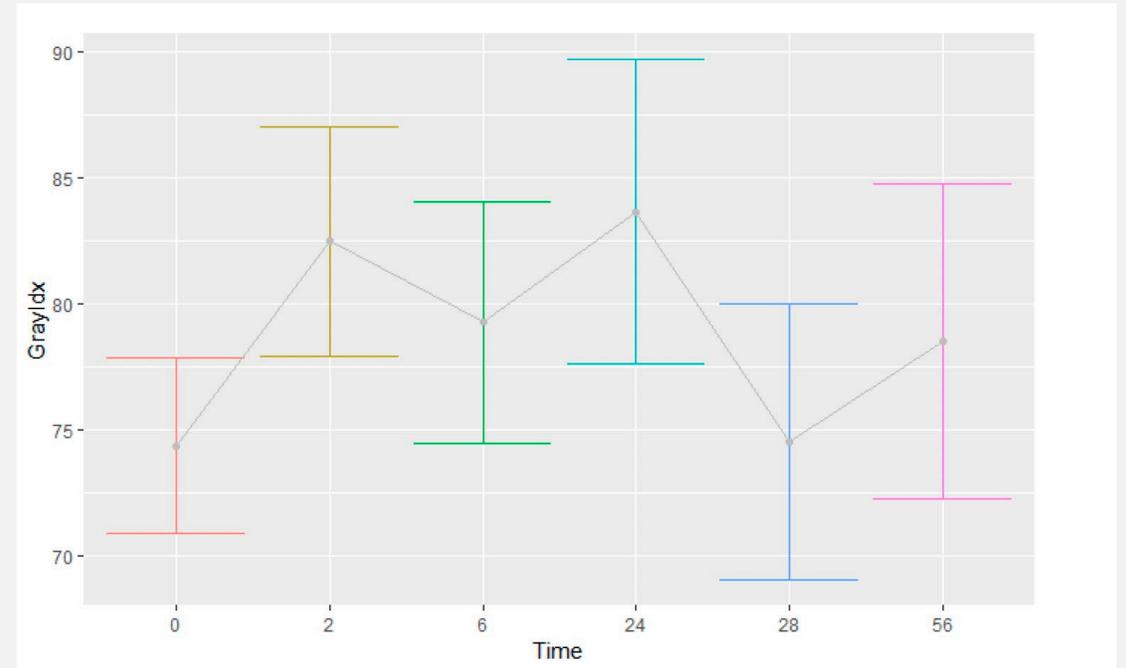
Evaluation of anti-wrinkle efficacy (full face)

Evaluation of anti-wrinkle efficacy (forehead)

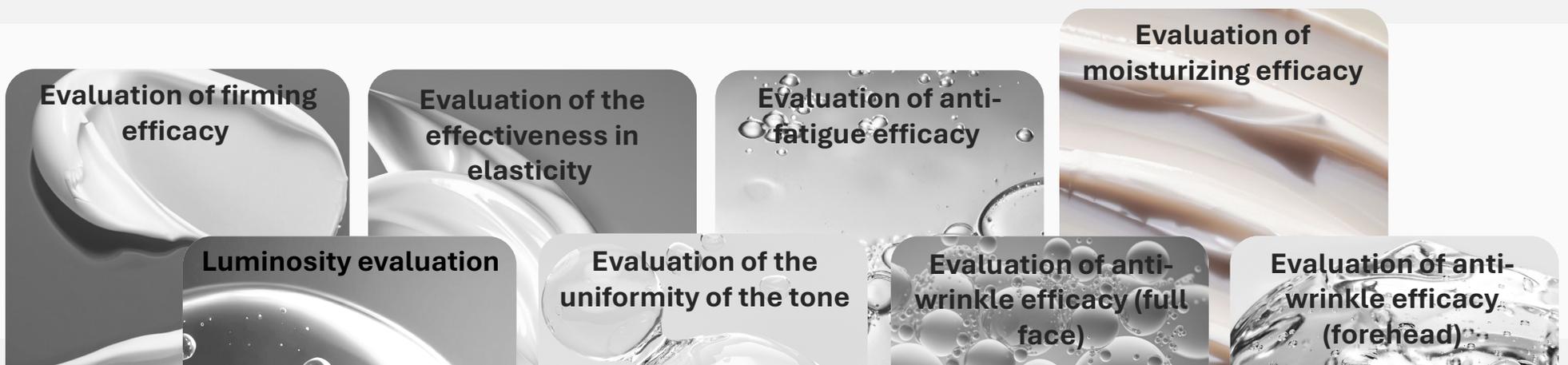
## 03 Dermatological efficacy evaluation

### Evaluation of moisturizing efficacy

→ After 24 hours, volunteers had a maximum increase of 12,4% when compared to T0, so the hydration improves.



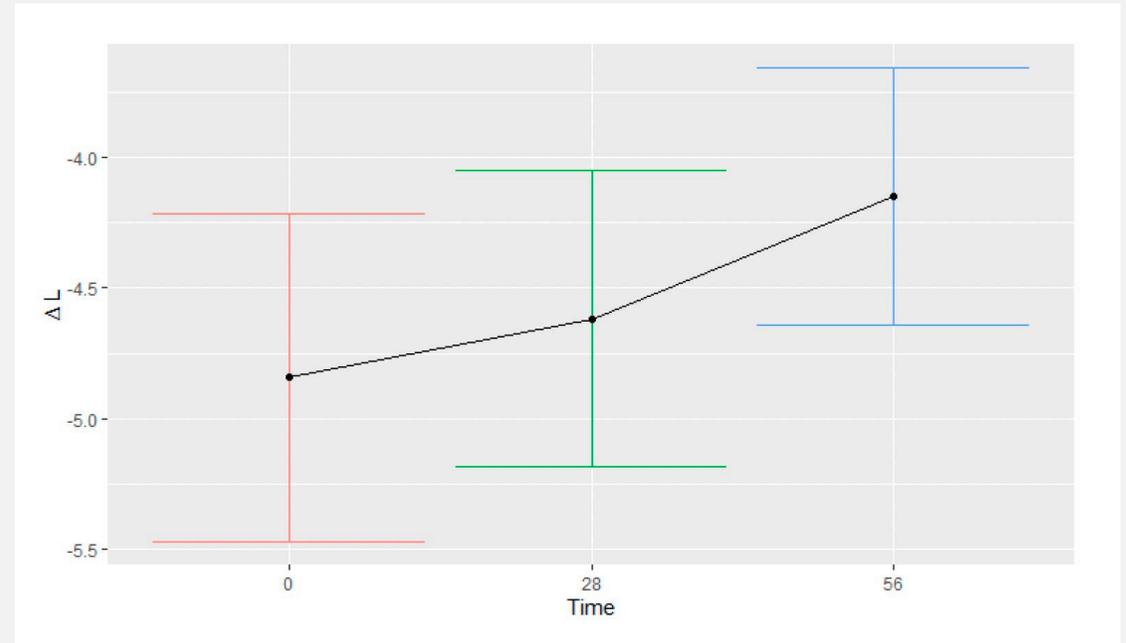
Average result of the parameter at different experimental times.



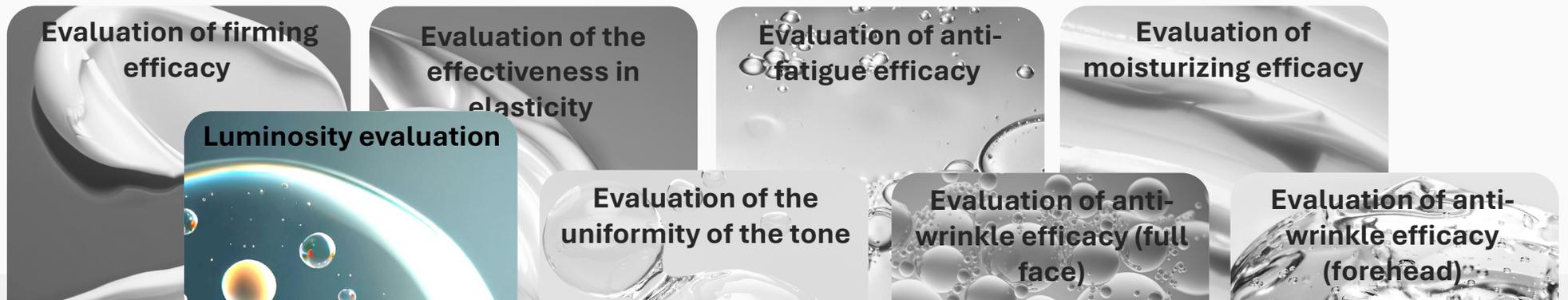
## 03 Dermatological efficacy evaluation

### Luminosity evaluation

→ After 56 days, volunteers had a maximum increase of 14% compared to T0, so **luminosity improves**.



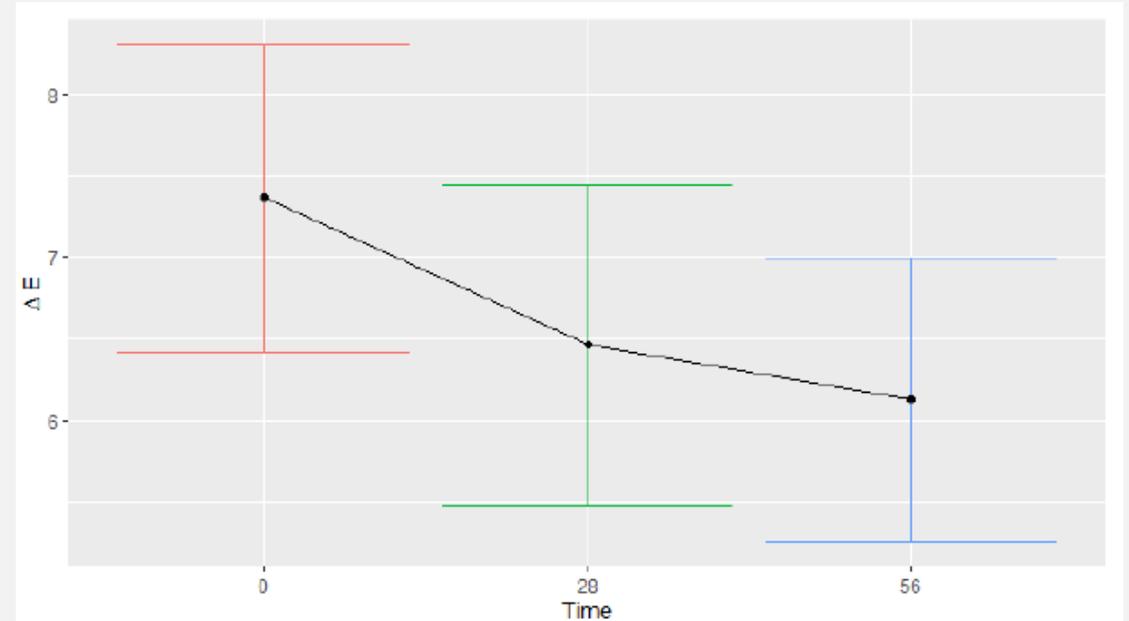
Average result of the parameter  $\pm$  standard error at each experimental time.  
The data trend is displayed over time.



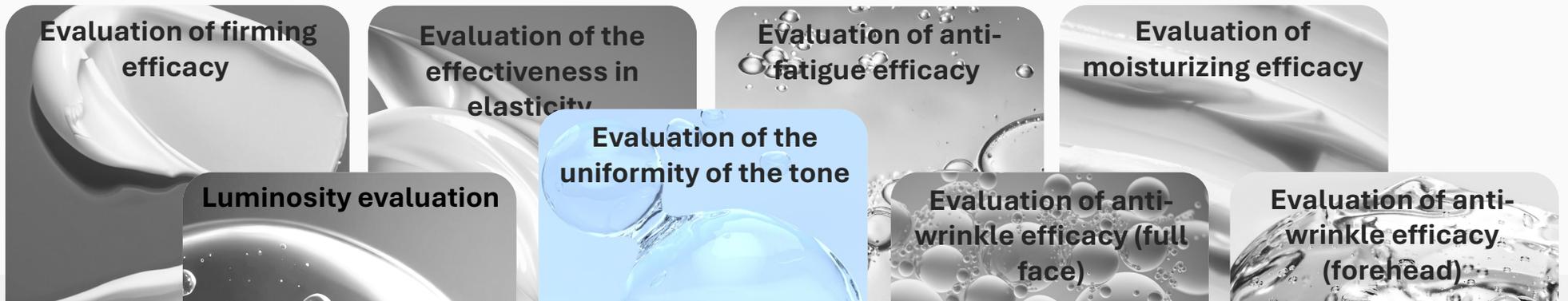
## 03 Dermatological efficacy evaluation

### Evaluation of the uniformity of the tone

→ After 56 days, volunteers had a maximum decrease 17% compared to T0, so the **tone is equalized**.



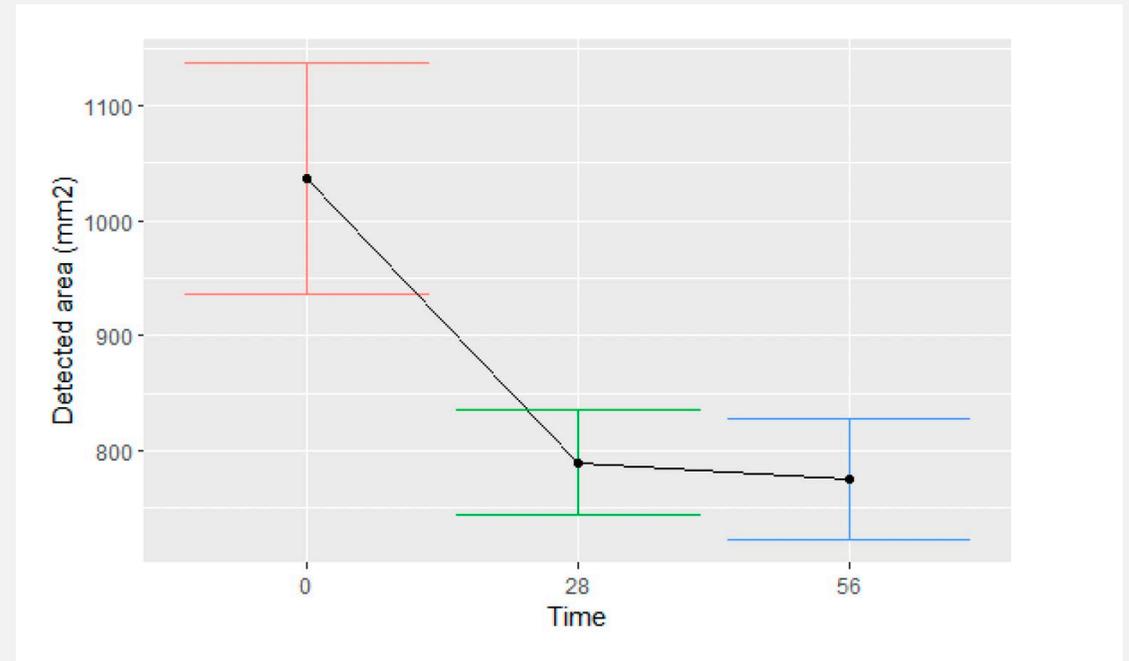
Average result of the parameter  $\pm$  standard error at each experimental time. The trend of the data over time is visualized.



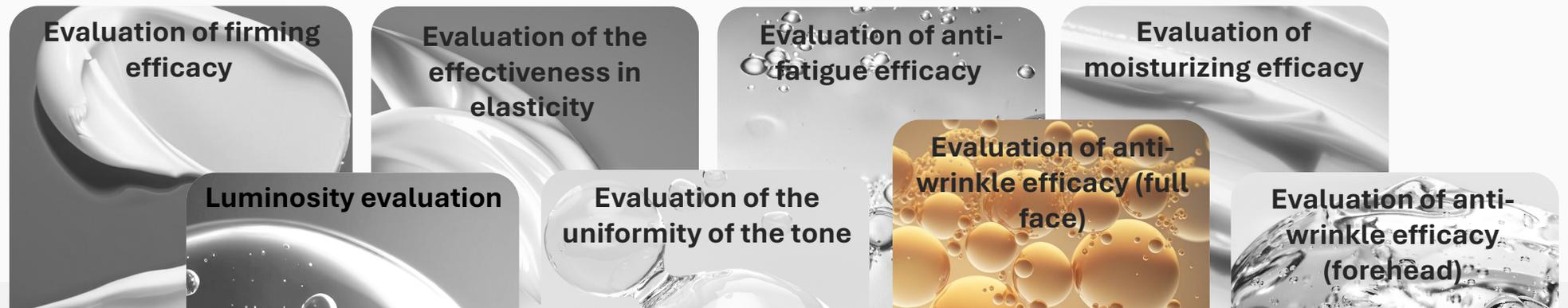
## 03 Dermatological efficacy evaluation

### Evaluation of anti-wrinkle efficacy. Full face

→ After 56 days, there is a statistically significant average decrease of 25,2% of the wrinkles compared to T0, so **wrinkles improve**.



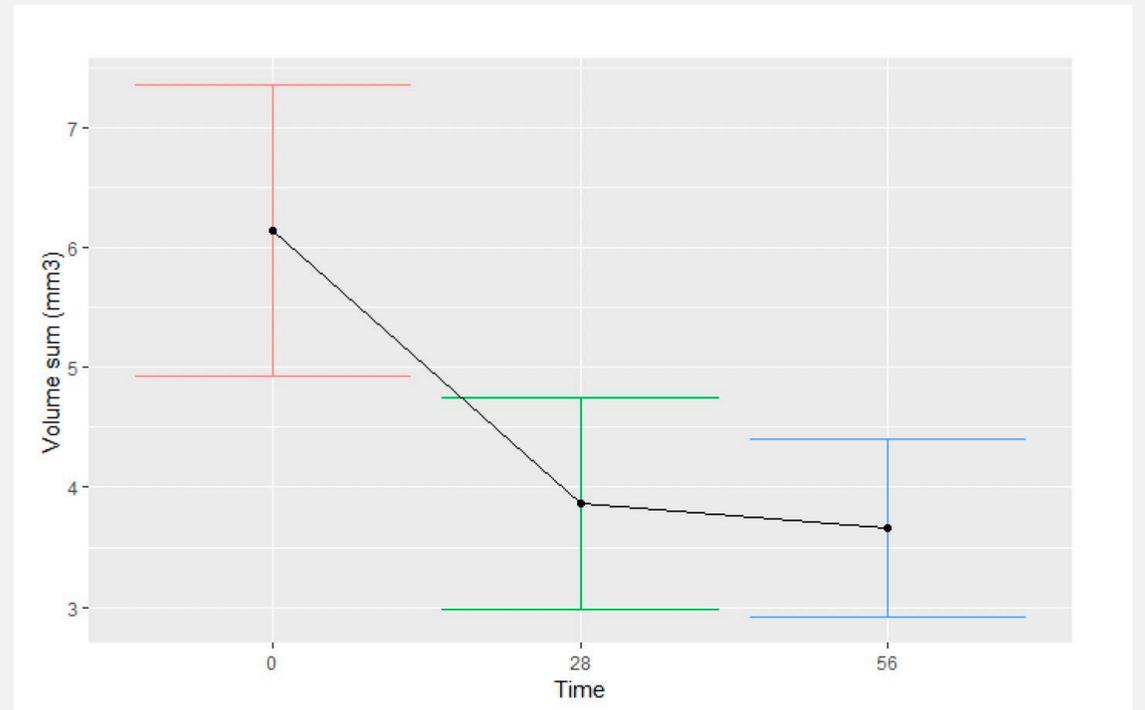
Average result of the parameter at different experimental times.



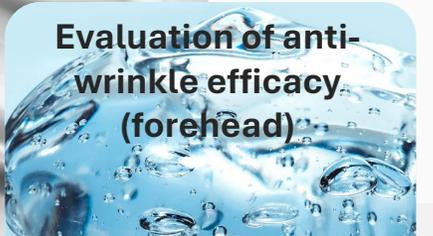
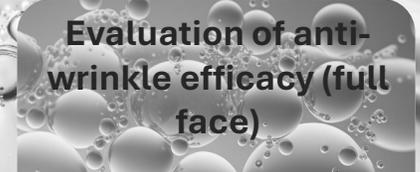
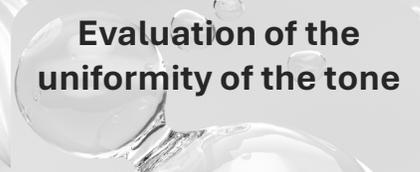
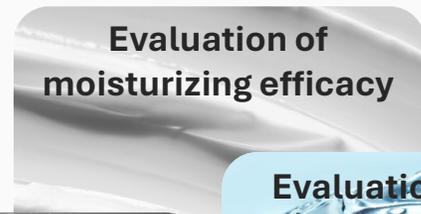
## 03 Dermatological efficacy evaluation

### Evaluation of anti-wrinkle efficacy. Forehead

→ After 56 days, there is a statistically significant average decrease of 40,4% compared to T0, so **forehead wrinkles improve.**



Average result of the parameter at different experimental times.



## 03 Dermatological efficacy evaluation

### Spots photos



T0



T28



T56



# 03 Dermatological efficacy evaluation

## Depigmentation effect



T0



T28



T56





## 03 Dermatological efficacy evaluation

### Subjective efficacy

The objective of the study was to determine the depigmenting efficacy of the cosmetic product containing **SCH Blend® Well-Age**, by means of biometric measurements in 22 volunteers with pigmented skin, after 56 days of using the product.

**82%** felt the treated area was more nurtured after the treatment

**86%** felt their skin softer after the treatment

**77%** felt their skin was more hydrated after the treatment



## 03 Dermatological efficacy evaluation

### Conclusion

→ Regarding the **instrumental efficacy**:

<b>FIRMNESS</b>	After 4 hours of applying the product, there is an increase in firmness of 15%.
<b>ELASTICITY</b>	After 4 hours of applying the product, there is a significant increase in elasticity of 31%.
<b>HYDRATION</b>	After 24 hours of applying the product, there is an increase in hydration of 12%.
<b>LUMINOSITY</b>	After 56 days of continuous use of the product, there is an increase in the luminosity of the 14%.
<b>UNIFORMITY</b>	After 56 days of continuous use of the product, there is an improvement in tone uniformity of 17%.
<b>WRINKLES</b>	After 56 days of continuous use of the product, there is a significant decrease in global wrinkles of 25%.
	After 56 days of continuous use of the product, there is a significant decrease in forehead wrinkles of 40%.



# 04

## Formulation guide





## 04 White cream

### Manufacturing method

1. Mix the Phase A ingredients and heat to 60-65°C.
2. Mix the Phase B ingredients and heat to 60-65°C.
3. Add B to A and homogenize vigorously with a Turrax until an emulsion is formed.
4. Cool down to 30°C approximately and add Phase C while mixing.

INGREDIENT	INCI	%	PHASE
Water	Aqua	70,8	A
Zemea	Propanediol	3	
Emullium Delta	Cetyl alcohol, Glyceryl stearate, PEG-75 sterate, Ceteth-20, Stereth-20	6	
Cupuacu Butter	Theobroma grandiflorum seed butter	2	B
Nafol 16-18 S	Ceteryl alcohol	1	
Cetiol OE	Cicaprylyl ether	3	
Myritol 318	Caprylic/capric triglyceride	2	
Neossance Squalane	Squalane	5	
Saemol 99	Isononyl isononanoate	2	C
Dermosoft OM	Methylpropanediol, Caprylyl glycol	2	
<b>SCH Blend® Well-Age</b>	Aqua, Propanediol, Potassium azeloyl diglycinate, Glabridin, Tetrahydropiperine, Polyglyceryl-6 caprylate, Polyglyceryl-4 caprate, Nonapeptide-1	3	
Parfum	Parfum	0,2	

# 05

## Specifications





## 05 Technical specifications

CHARACTERISTIC	SPECIFICATION
Aspect	Translucent solution
Color	Colorless
Odor	Characteristic
Density (g/mL)	1,0 – 1,2
Dry weight (%)	40 – 50
pH	7 - 8
<b>Heavy metals content</b>	
Lead (Pb)	< 10 ppm
Arsenic (As)	< 2 ppm
Mercury (Hg)	< 1 ppm
Cadmium (Cd)	< 1 ppm
Dosage (%)	2 - 5
Expiration	24 months
Solubility	Water soluble





# SCH Blend<sup>®</sup> Well-Age

Actives for the skin