

# WrinkLess

The natural way to turn back time



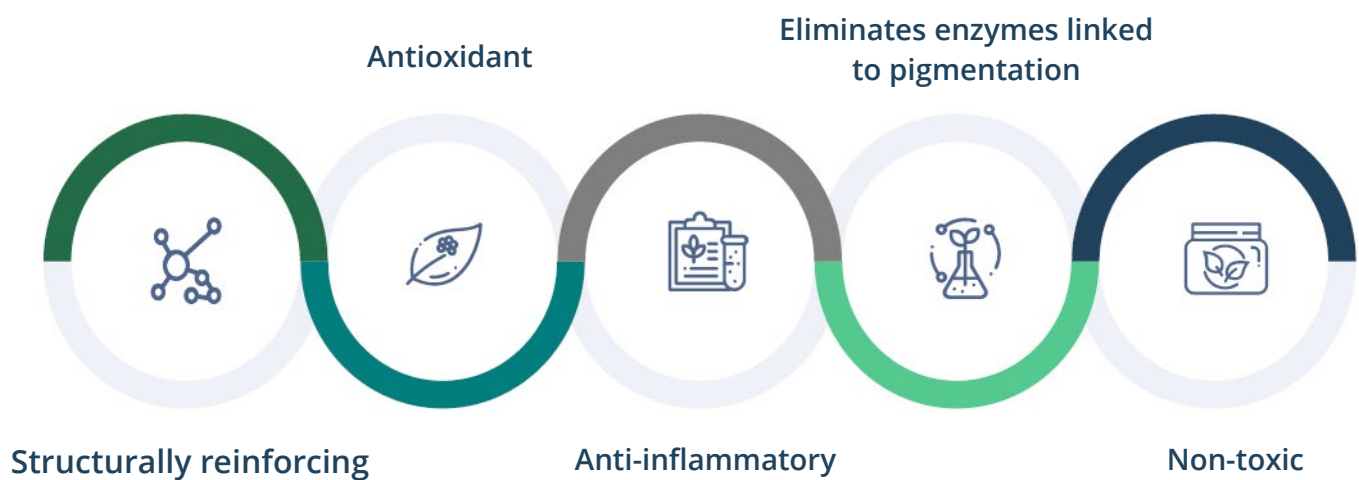
BLYDE  
BOTANICALS



# WrinkLess

## A younger you in four weeks

Scientifically proven to prevent ageing pathways in the skin through potent antioxidant defenses, effective anti-inflammatory action and compounds which stop the abnormal breakdown of elastin, WrinkLess reinforces the skins structural components to enhance integrity and smooth out wrinkles.





## WrinkLess, the secret to a younger you

Proven to target elastase an enzyme that contribute to loss of skin elasticity and cause wrinkle formation.

### AIM

*In vitro* inhibition of pancreatic elastase by means of spectrophotometric determination of the release of p-nitroaniline from a synthetic substrate, N-Succinyl-Ala-Ala-Ala-p-nitroanilide against an industry standard.

### RESULTS

WrinkLess inhibited elastase at a 50% inhibitory concentration (IC<sub>50</sub>) of 28.8 µg/mL.

Figure 1

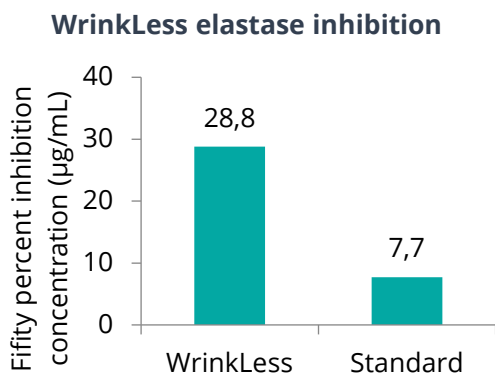


Figure 1: Fifty percent inhibitory concentration of WrinkLess against the elastase enzyme

Targets the formation of age spots as a result of the tyrosinase enzyme.

### AIM

Determine the potential anti-blemish properties of WrinkLess through the inhibition of the tyrosinase enzyme involved in the biosynthetic pathway of melanin.

WrinkLess inhibited 50% tyrosinase activity at a concentration of 120 µg/mL

Free radicals contribute to the ageing process. WrinkLess is proven to scavenge these free radicals.

### AIM

Determine the antioxidant capacity of WrinkLess against industry standards.

### RESULTS

WrinkLess scavenged 50% of DPPH free radicals at a concentration of 8.7 µg/mL, 50% of the hydrogen peroxide free radicals at a concentration of 56.08±2.88 µg/mL, 50% of superoxide free radicals at a concentration of 132.74±1.64 µg/mL.

Figure 2

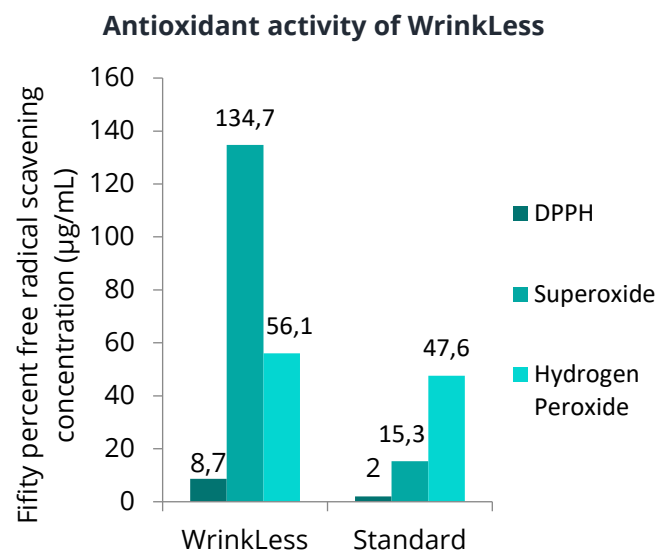


Figure 2: Fifty percent free radical scavenging capacity of WrinkLess

# In vitro & in vivo efficacy



Targets inflammation associated with ageing skin.

## AIM

Determine the 5-lipoxygenase (5-Lox) inhibitory activity of WrinkLess.

## RESULTS

WrinkLess inhibits 5-Lox at an  $IC_{50}$  of  $29.65 \pm 2.92$   $\mu\text{g/mL}$  compared to the industry standard with an  $IC_{50}$  of  $14.87 \pm 0.69$   $\mu\text{g/mL}$ .

Confirmed non-cytotoxic activity.

## AIM

Determine the cytotoxicity of WrinkLess against human keratinocytes (HaCat).

## RESULTS

WrinkLess is non-toxic towards HaCat cells at the highest concentration tested of 400  $\mu\text{g/mL}$ .

The sun is one of the major causes of ageing. Wearing an SPF has never been this important.

## AIM

To determine the *in vivo* Sun Protection Factor (SPF) protection provided by WrinkLess.

## RESULTS

The mean SPF of the reference standard is 16.9 and therefore comply. The dry (static) Sun Protection Factor (SPF) result achieved for the test product with ten valid individuals test subjects indicates a mean Sun Protection Factor (SPF) of 21.9.

The results indicate that WrinkLess has increased the reference standard's SPF from a mean SPF of 16.9 to a mean SPF of 21.9. Therefore in association with a commercially known SPF cream formulation, may contain antioxidant activity that may assist with prevention of free radical formation and thus assisting with the function of sunscreen products.

WrinkLess confirmed to be non-irritating when tested in human validation studies.

## AIM

To determine the primary skin irritancy potential of WrinkLess when applied directly to the skin's surface *in vivo*.

## RESULTS

WrinkLess is confirmed as a non-irritant with a percentage irritancy potential of -9.00% compared to the industry standard with a percentage irritancy potential of 100%.

WrinkLess visibly reduce fine lines and wrinkles *in vivo*.

## AIM

To demonstrate the wrinkle reduction capacity of WrinkLess at 5% *in vivo*.

## RESULTS

*In vivo* studies confirmed 5% of WrinkLess to be effective in reducing wrinkles after application two times a day for 14 days and 28 days. [Figure 3](#)



Figure 3: *In vivo* wrinkle reduction activity of 5% WrinkLess. BL: Baseline, D14: Day 14 of treatment, D28: Day 28 of treatment

## SUMMARY FILE

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### INCI

Alcohol (and) Water (and) Myrsine  
Africana Leaf Extract

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### Appearance

Dark brown to dark green extract

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### Preservative

None

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### Mutagenicity

Non-mutagen

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### Heavy-metal detection

None detected

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### Bacterial TMA (Total Microbial Activity)

None detected

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### Yeast and mould

None detected

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### Recommended concentration of use

5%

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### Solubility

N/A

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### pH

5.28

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### Storage

Store between 5 – 25 °C in its original packaging and protected from moisture and direct sunlight

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### Predicted shelf Life

24 months

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# BLYDE BOTANICS

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