



KAFFE BUENO

- Have you heard of Kaffe Bueno before?
- Have you worked with coffee-derived ingredients before?
- Have you worked with upcycled ingredients? Drop us a note in the chat and tell us about your experience with upcycled ingredients





**KAFFE
BUENO**

KAFFOIL-R™ THE NEW ARGAN OIL

Tuesday 1st of November 2022



Alejandro Franco
Co Founder and CCO of
Kaffe Bueno



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CTO and Head of R&D at
Kaffe Bueno



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Consultant Cosmetic
Chemist





KAFFE BUENO

UNLOCKING COFFEE'S HEALTH POTENTIAL

BUENO FOR YOU, GOOD FOR ALL

KAFFOIL™ - THE NEW ARGAN OIL
UL PROSPECTOR WEBINAR
1ST NOVEMBER 2022

Confidential & Proprietary.

Certified



**This company meets the
highest standards of social
and environmental impact**

Corporation



KAFFOIL-R™ THE NEW ARGAN OIL

KAFFOIL-R™ is the upcycled sustainable alternative to Argan oil.

KAFFOIL-R™ had the same effects as Argan oil in repairing chemically damaged hair, strengthening hair, preventing breakage and split ends, and increasing hair shine.

KAFFOIL™ is more beneficial for the environment and for the people who produce it, than Argan oil.





Agenda

Introduction to Kaffe Bueno

Find Beauty in Coffee

KAFFOIL™

Efficacy data

KAFFOIL-R™

Efficacy data

New launches – skin, hair, sun

Questions

Certified



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**KAFFE
BUENO**

Our strategy

What do we do?

Kaffe Bueno is an award-winning Danish bioscience company upcycling coffee by-products into high-performance ingredients for cosmetics, nutraceuticals, and food & beverage

Why do we do it?

- To satisfy customers and consumers' demand for natural, bioactive and sustainable ingredients
- Change how the world sees coffee by unlocking its health potential
- Contribute to a circular and more sustainable planet and fair coffee value chain

How do we do it?

- Curiosity: a high-tech product innovation platform based on green chemistry, biotech and nanotechnology
- Customer focus: relentless focus on solving customer and consumer needs
- Commercial & entrepreneurial savviness: collaboration and partnerships enabling scale-up & capital efficiency

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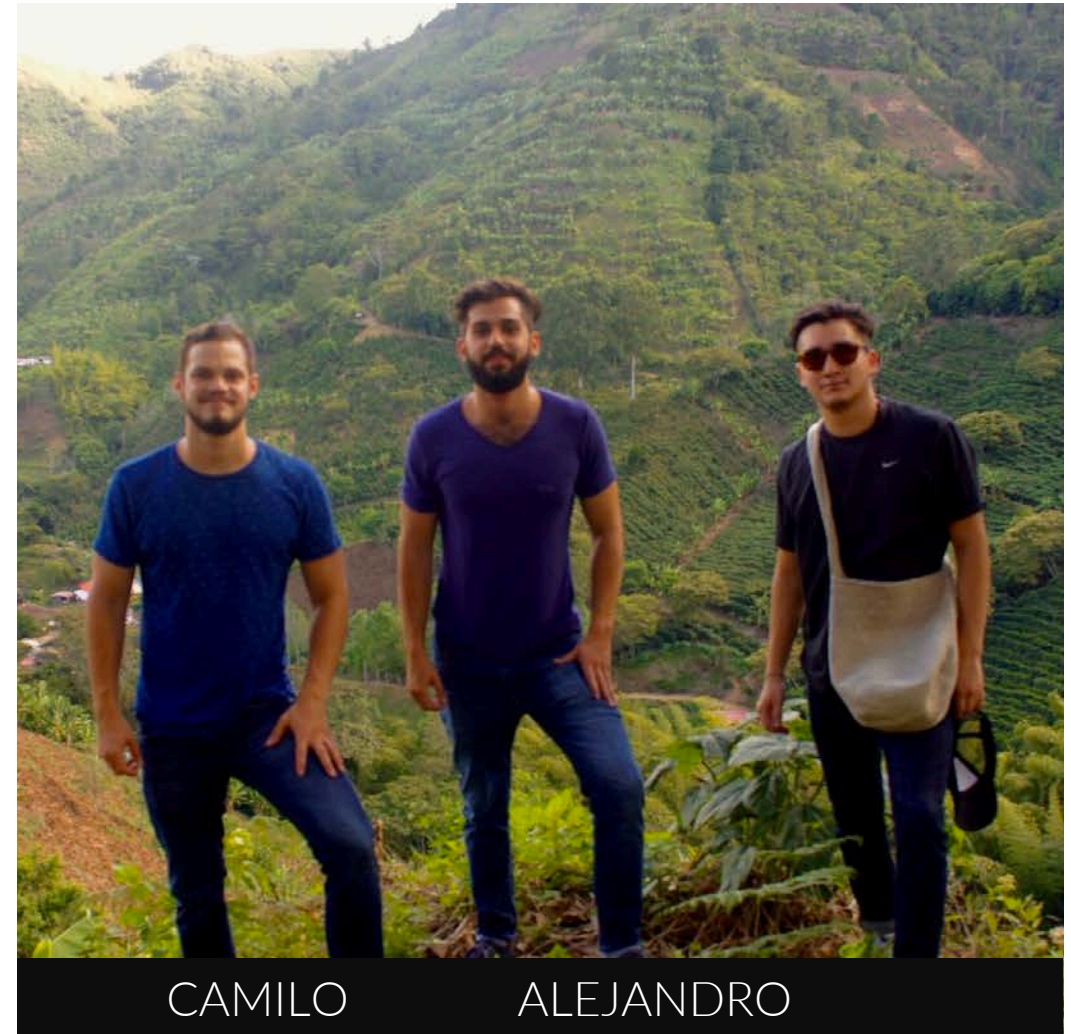
This company meets the highest standards of social and environmental impact

Corporation

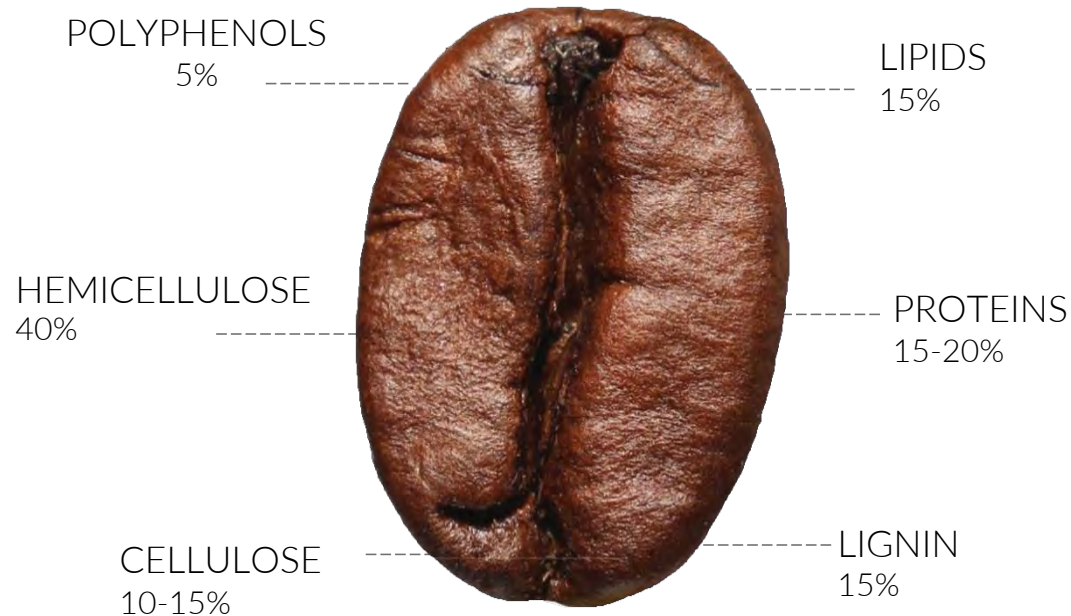
Origins

Founded by three Colombian entrepreneurs:
Juan Medina, Alejandro Franco, and Camilo Fernandez.

- Growing up in Colombia, coffee was used not only as a drink but as a “super ingredient”: when they fell over and got a scratch, their grandmother would put coffee grounds to help the wound heal.
- During their university studies in London, they realized how little of the coffee is used in the drink (1%) (meanwhile farmers were not getting paid fair prices for it) and, through a LOT of research, that all of the health-promoting compounds (except the caffeine) remain in the spent coffee grounds.
- Also, they learned that coffee by-products, if not taken care of properly, can vastly contribute to global warming through the release of greenhouse gases, such as methane.
- So, seeing the huge untapped potential of coffee, coupled with the need to work towards a more circular & sustainable society, drove them to dedicate their lives to changing how the world sees and treats coffee.



The magical bean



Why coffee?

The most consumed beverage on Earth

- 10BN kg consumed in 2021
- Coffee revenues expected to grow by a CAGR of ~7% between 2023-2025
- Growth partly driven by increase in demand for cold brew and RTD (source of raw material for Kaffe Bueno)

Proven “super ingredient”

- 100+ clinical studies confirming coffee’s association with health positive outcomes such as preventing and treating diabetes, Alzheimer’s, Parkinson’s, cardiovascular diseases and skin conditions

Important for climate & society

- 15 kg of CO2 per kg produced (farm level) + 5,6 kg CO2 per kg when disposed as spent coffee grounds
- 1% of its potential value is currently used to make a cup of coffee, making it the most underutilized resource on earth
- 125M people depend on coffee for their daily income

Plus, strong transition towards natural & bioactive ingredients driven by consumers and industry



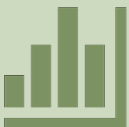
Rising consumer demand for natural ingredients due to rejection of synthetics and petrochemicals



Industry majors (L'Oréal, Unilever, Beiersdorf, etc) have pledged to reformulate all their products to be 100% natural



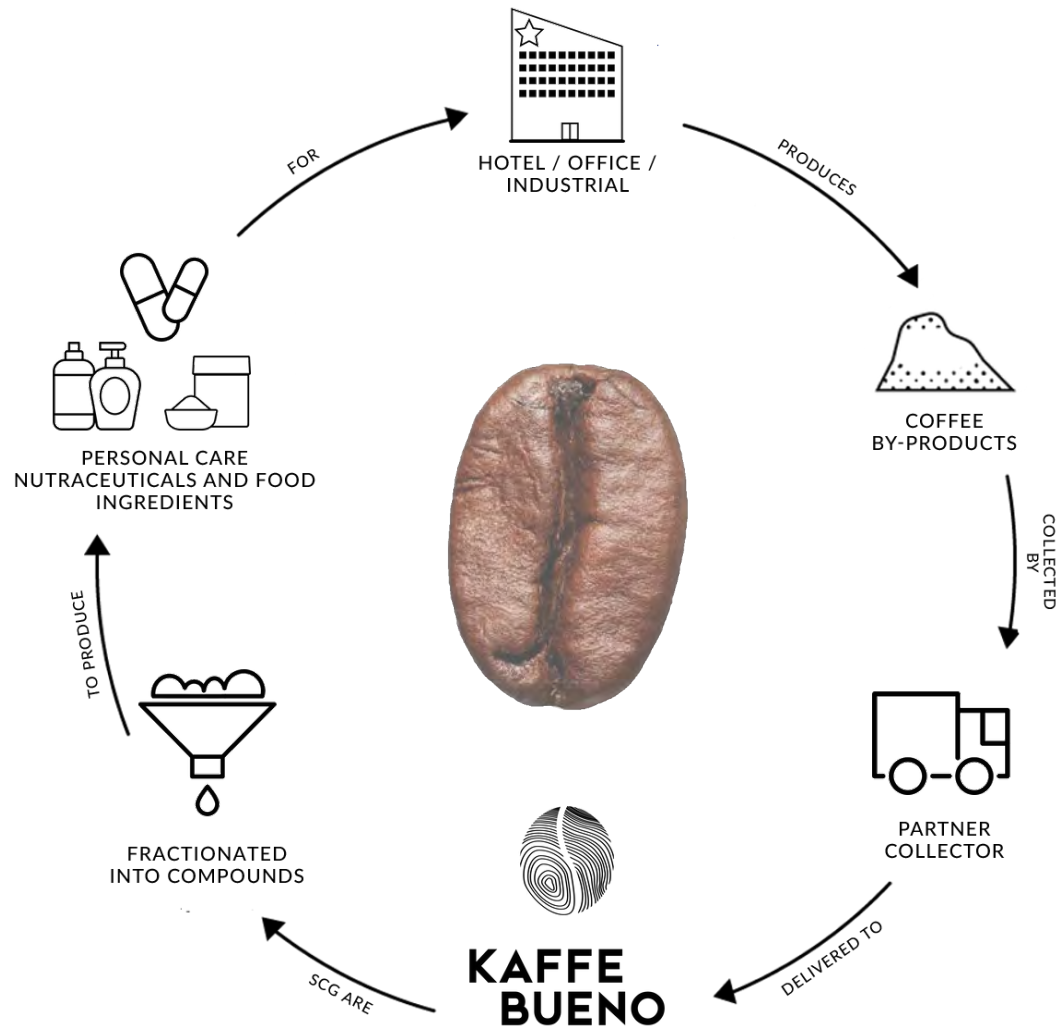
Current natural alternatives to synthetics & petrochemicals cannot match performance and/or price



Rising prices of raw materials caused by broken supply chains = preference for local and efficient

Opportunity driven by both consumer demand and industry looking for better price/performance ratio in addition to sustainability requirements

Our solution: upcycle coffee grounds



How it works

- We partner with industrial coffee “waste” producers and process it in our 1st of its kind coffee biorefinery
- Supply for 1st plant guaranteed (industrial via Paulig), in future a combination of industrial supply and hotels/offices
- Through the use of biotech, green chemistry, and nanotechnology, we have developed a novel coffee biobased platform to break down coffee into its molecular components and produce a wide range of ingredients for the WellCare market
- Through a market-focused, science-based approach we help our customers target their biggest challenges

Product launches

- First 2 products launched: coffee oil and fibre (KAFFOIL and KAFFIBRE)
- Launches in 2023: Actives in Hair Care, Sun Protection, and Anti-Ageing. More in the pipeline for 2024 and onwards

Some of our ingredients

In the market since 2019



KAFFOIL™

- Skin benefits: Anti-ageing, Moisturising, Wound healing, SPF booster
- More sustainable and higher performance substitute to Argan oil
- Currently premium price. In-house production will be competitive with Argan oil and other specialty oils
- Measurable impact on brands



KAFFIBRE™

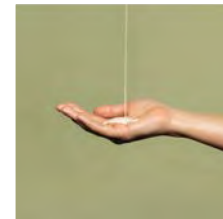
- Skin benefits: exfoliating
- Substitutes microplastics in personal care products
- Price competitive vs. natural alternatives such as apricot kernels, quartz, olive kernels
- Homogeneous and smaller particle size than normal ground coffee = easier to work with in cosmetics
- Measurable impact on brands

Next in line to launch. 2 out of 17 in pipeline



KAFFAGE™

- Skin benefits: Anti-ageing, prevents and reduces wrinkles, Skin microbiome friendly, SPF boosting, Preservative booster, Helps naturally mimic skin tones
- Highly multifunctional – in-demand by industry
- Helps manufacturers achieve clean label
- Pending patent for use of molecule in such way
- Soluble in water and oil
- Premium pricing is given superior performance



KA-ZuN™

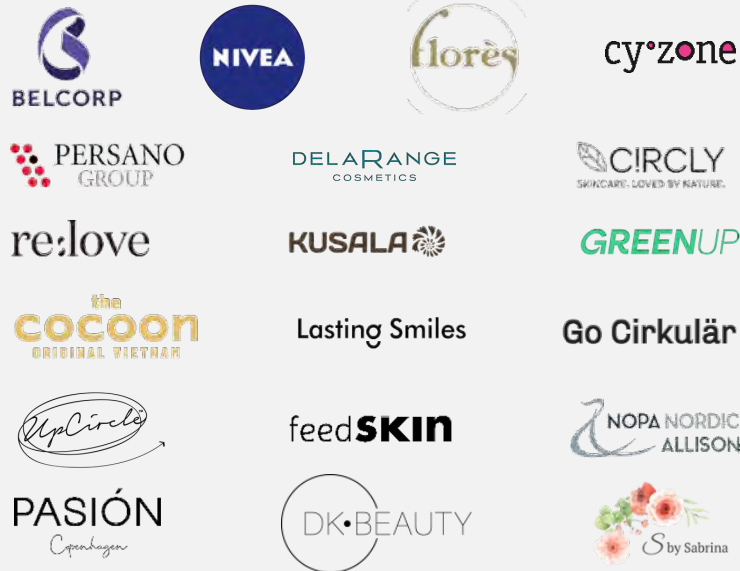
- Skin benefits: Broad-spectrum UV-filter, Antioxidant, Prevents photoaging
- Helps reduce undesirable white cast effect in sunscreens + superior UV protection
- Reduces the need for chemical UV filters, like octocrylene, homosalate, avobenzone
- Reduces photocatalytic activity of Zinc oxide – making its SPF effect last longer
- Competitive pricing vs alternatives

Great market traction with our first 2 products

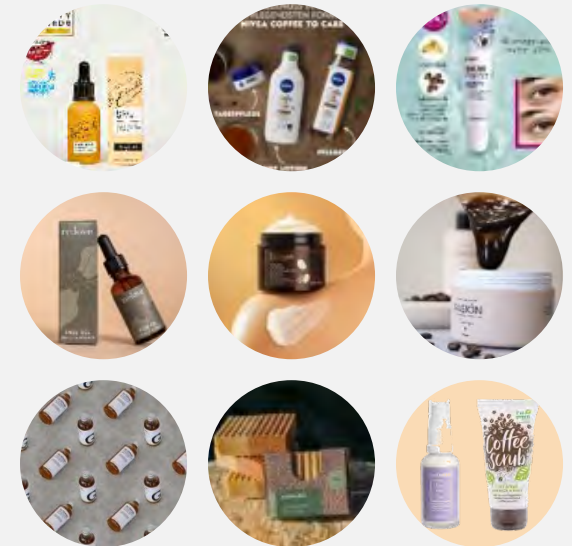
Find Kaffe Bueno ingredients
15+ markets today



15+ brands / manufacturers
using Kaffe Bueno ingredients



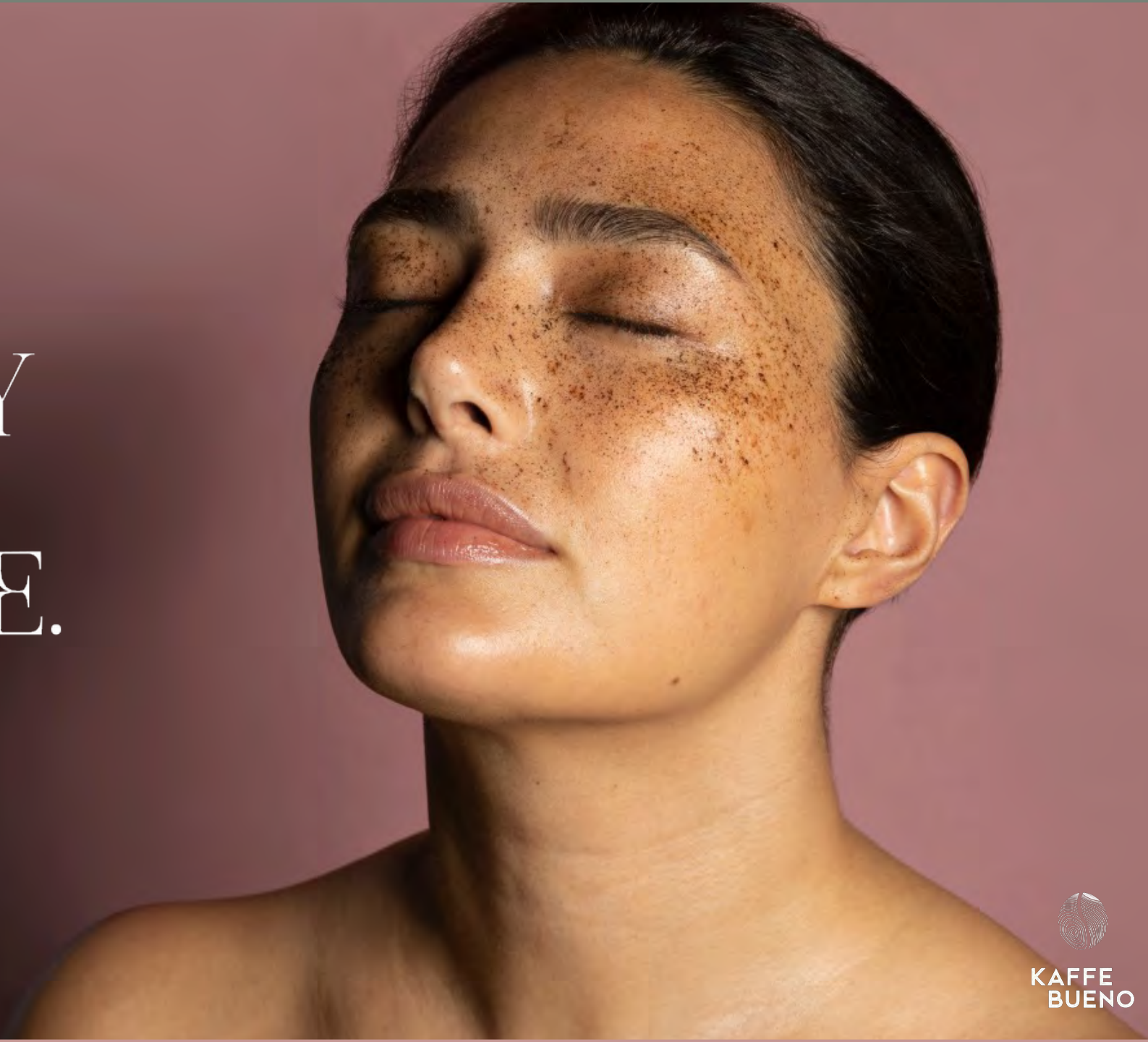
Examples of 9 finished products
in the market w/ Kaffe Bueno ingredients



COMMERCIAL
PARTNERS

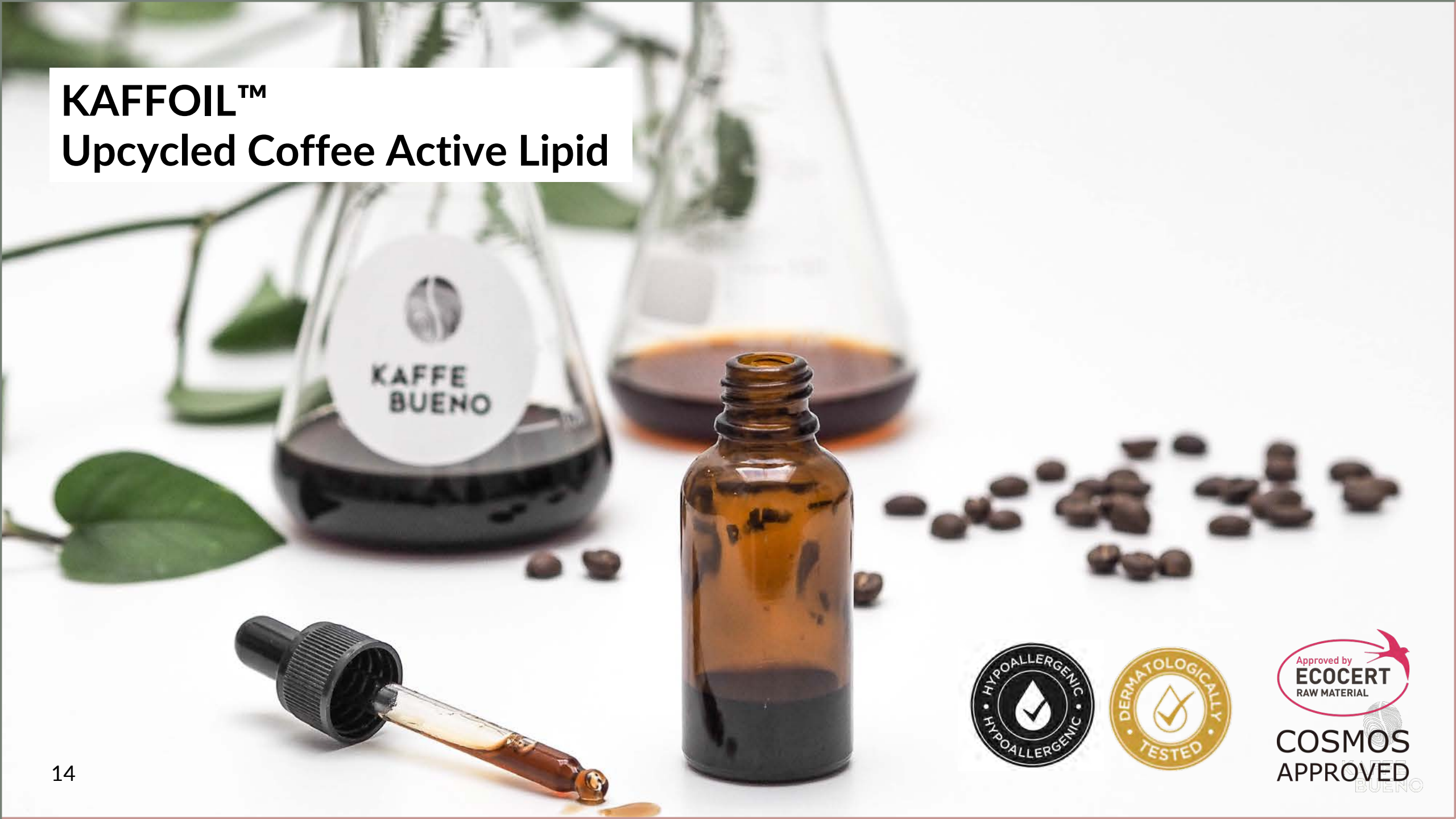


FIND
BEAUTY
IN
COFFEE.



KAFFE
BUENO

KAFFOIL™ Upcycled Coffee Active Lipid



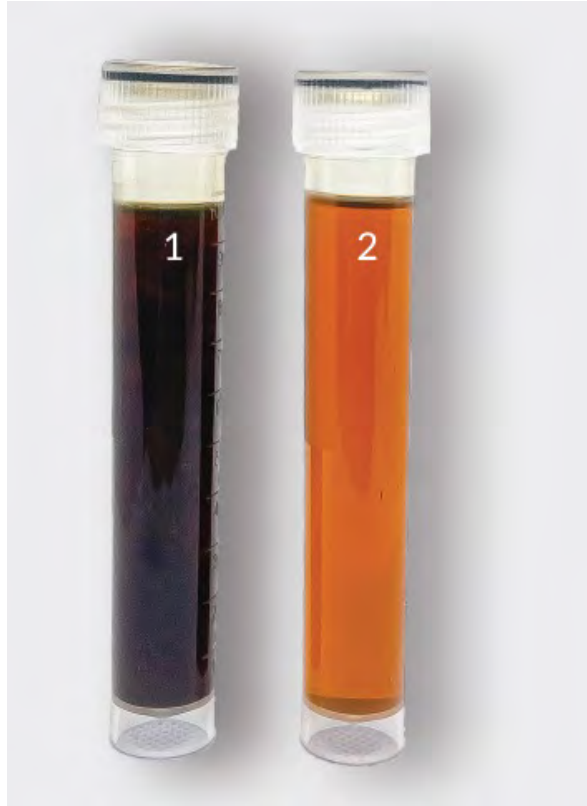
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BUENO

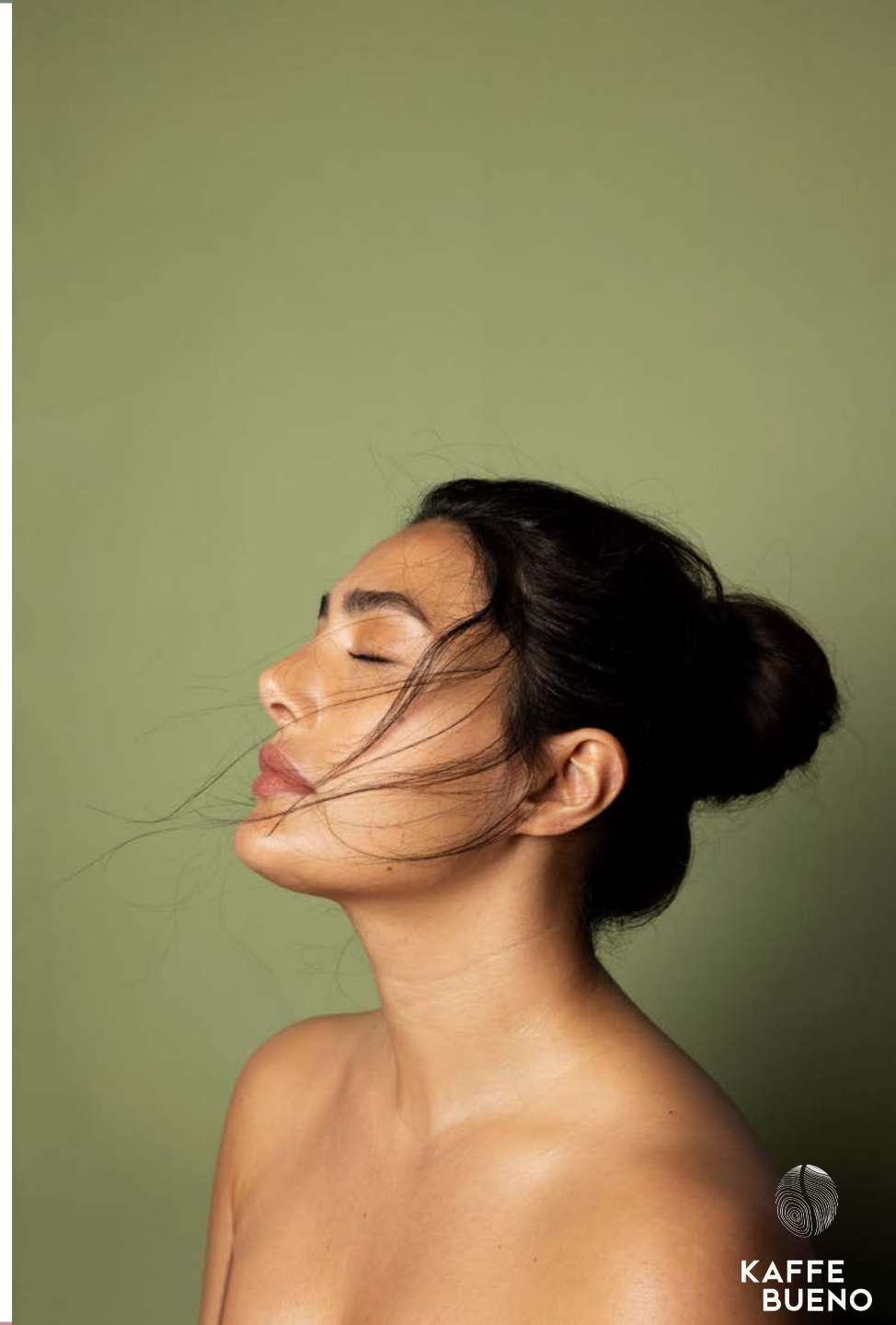
KAFFOIL™ vs. KAFFOIL-R™

01002

01003



1. KAFFOIL™ - fragrant coffee aroma, darker colour, more viscous.
2. KAFFOIL-R™: near neutral smell, soft notes of caramel, translucent golden colour, lighter texture.



KAFFOIL™ - Upcycled Coffee Active Lipid

Product Code: 01002

- Launched first version (01001) in 2020 with Givaudan under trade name Koffee'Up™
- This is the new standard version launching now – improved process, sustainability and characteristics.
- Characteristic coffee aroma and colour.
- Excellent emulsifying properties.



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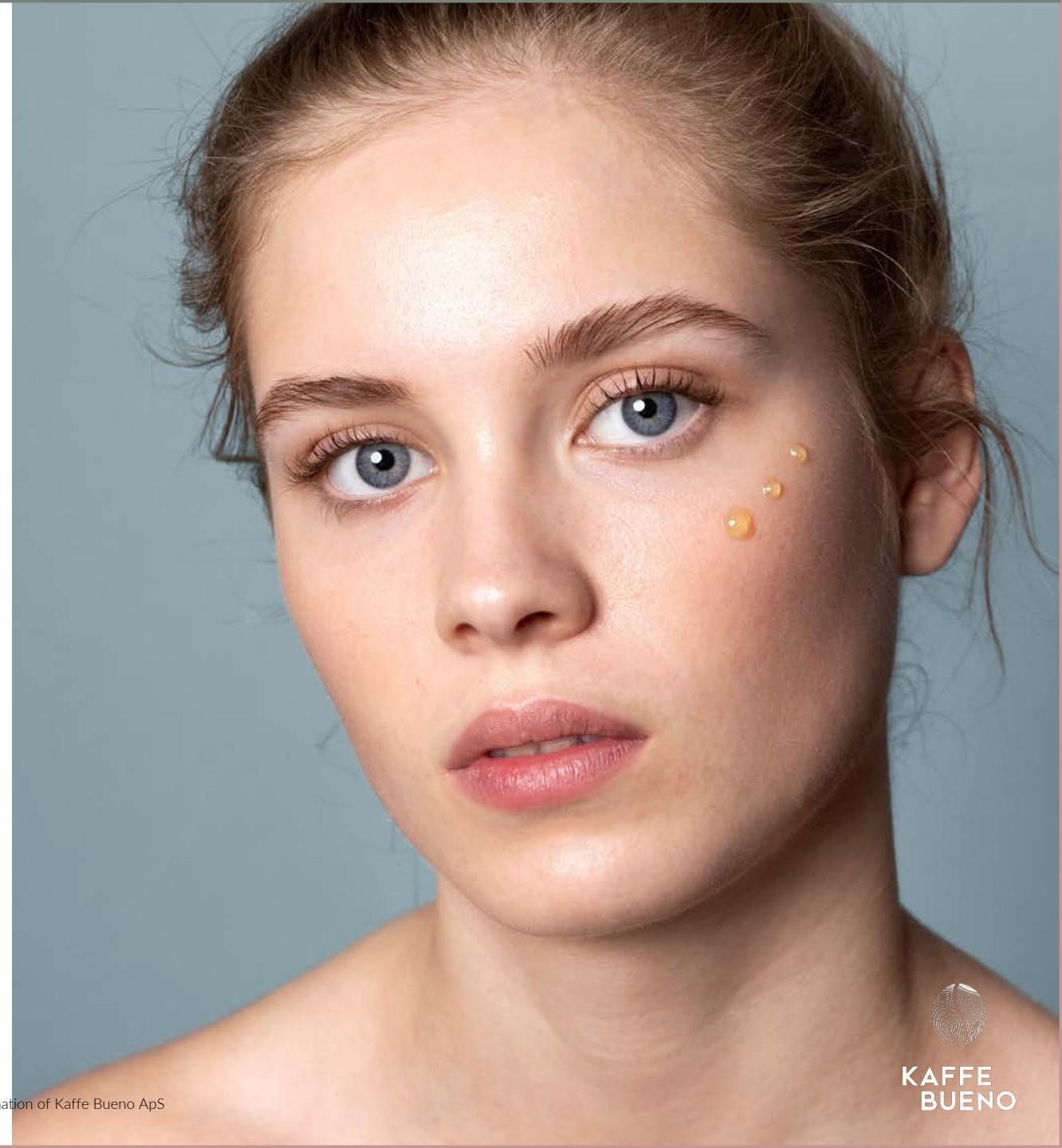
KAFFOIL™

Product Code: 01002

Recommended applications:

- Face serums and oils
- Anti-ageing creams
- Body lotions
- Shampoo
- Conditioners
- Liquid hand soaps
- Bar soaps

Tool for Anti-Ageing, Antioxidant,
Moisturising, Skin-Barrier Enhancing, SPF
Boosting at low dosages – 0.2% - 1%



SPF Values

| SAMPLE | SPF |
|------------|------|
| KAFFOIL™ | 11,5 |
| KAFFOIL-R™ | 7,8 |





KAFFOIL™
EFFICACY DATA

SKIN

Skin repair 1/2

Keratinocytes migration using the skin repair method (with HaCaT cells)

Keratinocyte cells lines (HaCaT) grown to confluence in the Dulbecco's Modified | Eagle's Medium (DMEM) without FBS (Fetal Bovin Serum) at 37°C in a humidified atmosphere of 5% CO₂.

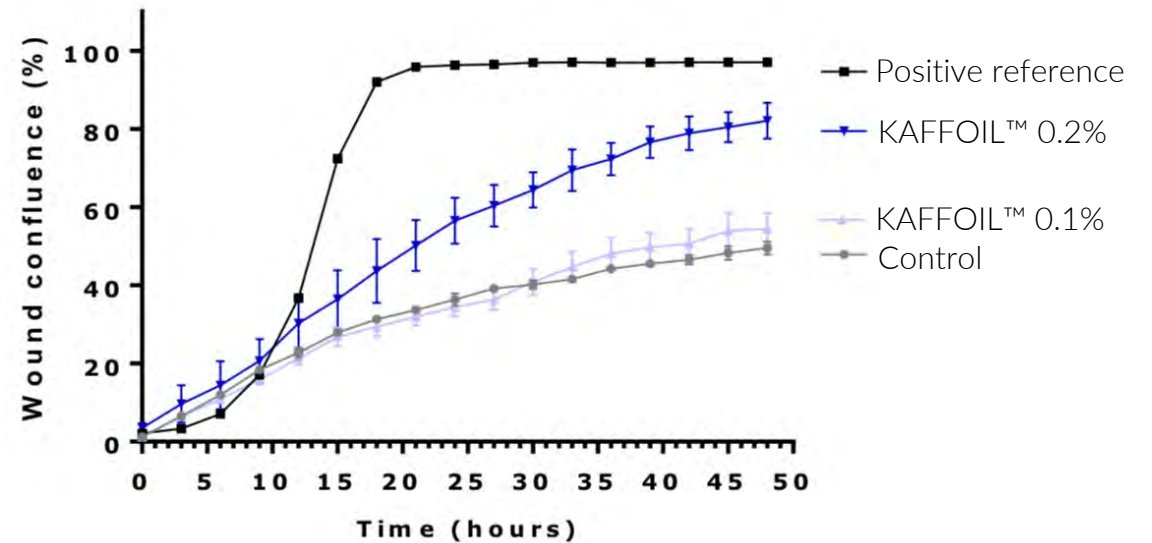
Cells were treated with KAFFOIL at 0.1%, 0.2%, whereas the positive control was at 10% (FBS).

Wound images are taken every 3 h for 48 h, and the data are analysed by the integrated metric Relative Wound Density. The data are expressed in percentage.

Results:

KAFFOIL™ at 0.2% demonstrated an activation of cell migration to reach at least 80% of wound confluence after 48h.

KAFFOIL™ induced an increase of cell migration, as observed by the reduction of wound confluence, demonstrating skin repair properties



Skin repair 2/2

Keratinocytes migration using the skin repair method (with HaCaT cells)

Keratinocyte cells lines (HaCaT) grown to confluence in the Dulbecco's Modified | Eagle's Medium (DMEM) without FBS (Fetal Bovin Serum) at 37 ° C in a humidified atmosphere of 5% CO₂.

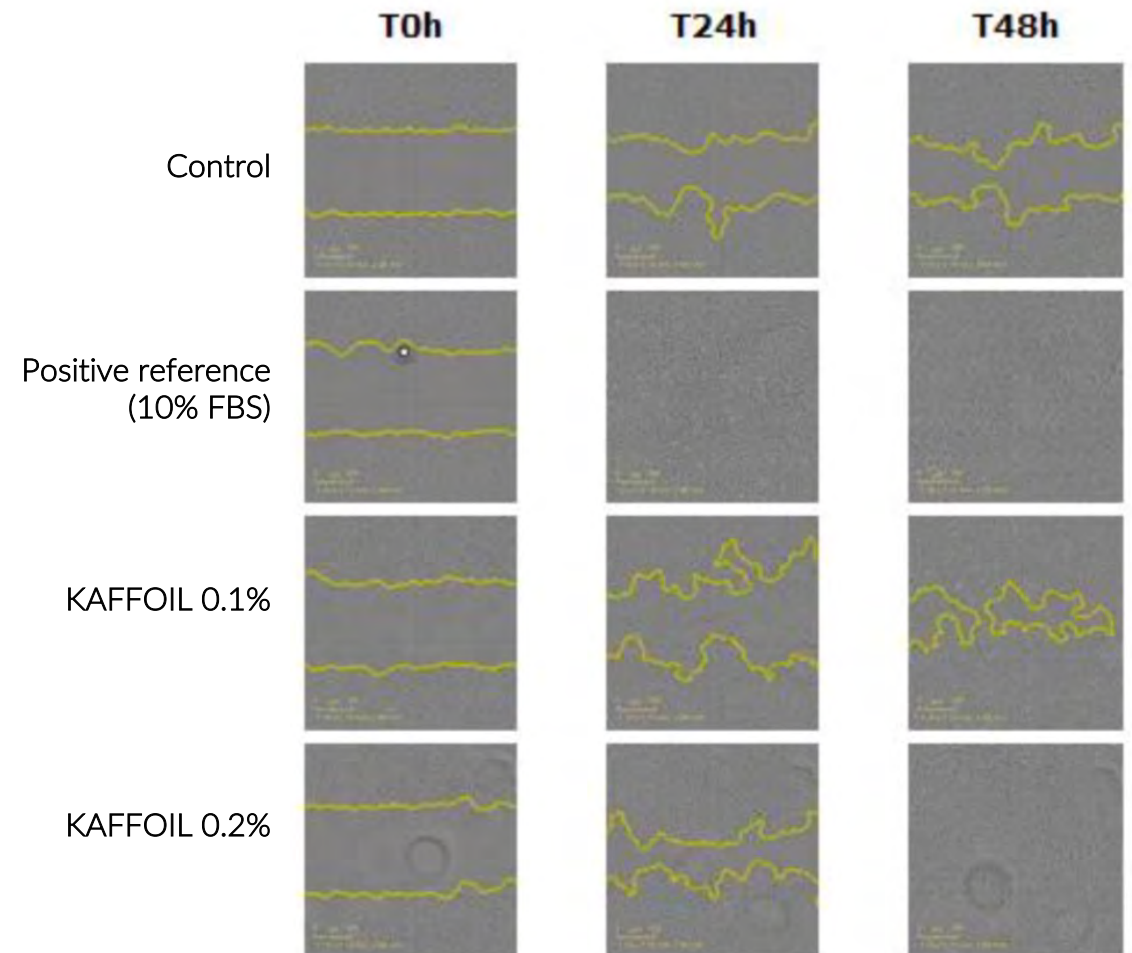
Cells were treated with KAFFOIL™ at 0.1%, 0.2% whereas the positive control was at 10% (FBS).

Illustrative pictures showing the level of wound confluence after T0h, T24h and T48h of incubation with KAFFOIL™.

Results:

KAFFOIL™ at 0.2% demonstrated an activation of cell migration to reach 100% of wound confluence after 48h at 0.2%.

KAFFOIL™ induced an increase of cell migration as observed by the reduction of wound confluence, demonstrating skin repair properties



Improvement of Antioxidant defense

Activation of the Nrf2 pathway

The HaCaT-ARE-Luc cells line contains the Antioxidant Response Element (ARE)-Luc, coupled to luciferase detection. We can correlate the level of Nrf2 activation to a measurement of luciferase activity (in RLU).

The cells were treated in a complete culture medium (DMEM) containing 10% FBS in a CO2 incubator at 37°C.

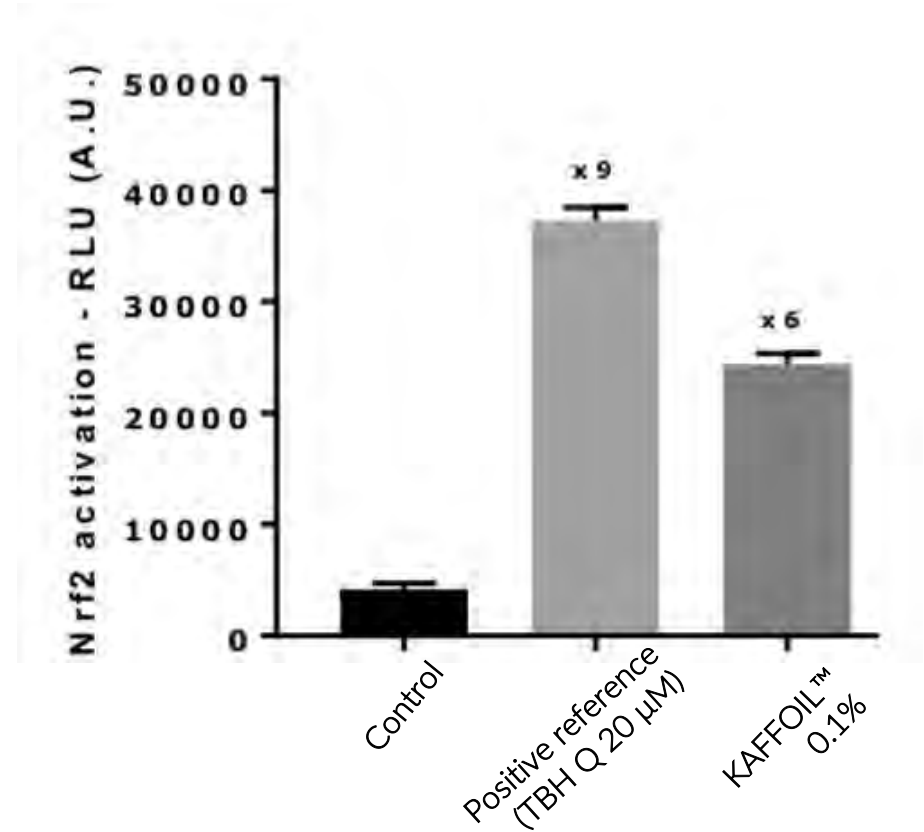
For induction of Nrf2 activation the cells were treated for 6h directly diluted in culture medium.

As a positive reference the cells are treated with the activator of the Nrf2 pathway (TBHQ) at 20 µM . Data are normalized according to untreated control at 1.

Cells were treated with KAFFOIL™ at 0.1%, 0.2%.

Results:

In presence of KAFFOIL™ an activation of Nrf2 pathway is observed, throughout the increase of Luciferase activity by 6 times with KAFFOIL™ at 0.1%, demonstrating antioxidant properties.



Improvement of Antioxidant defense

Reduction of ROS production

The Keratinocyte cells lines (HaCaT) are cultured in DMEM supplemented with 10% FBS; complete culture medium is renewed when the cells reached 80% confluence.

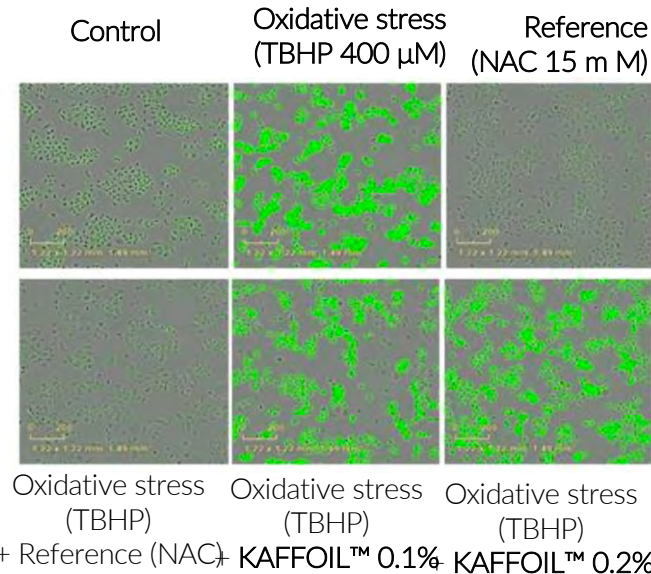
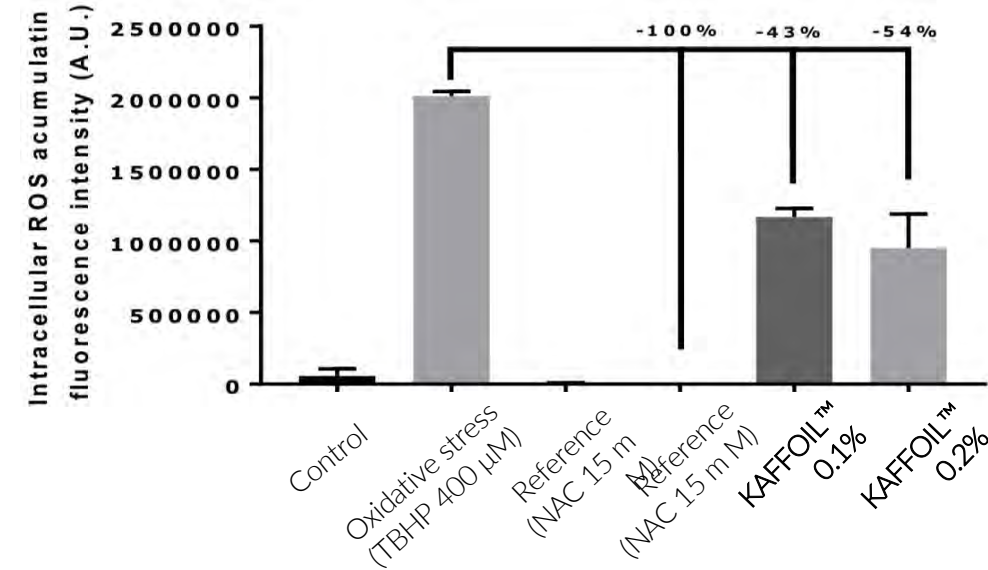
The intracellular accumulation of reactive oxygen species (ROS) is detected by fluorimetry.

For inhibition, the cells are pre-incubated with the test substances diluted in culture medium for 30 min and oxidative stress is induced with 0.4 mM Tert-butyl- hydroperoxide (TBHP) at 0.4mM. The data are expressed in percentage relative to untreated basal condition.

Cells were treated with KAFFOIL™ at 0.1%, 0.2% NAC being the positive control (antioxidant control).

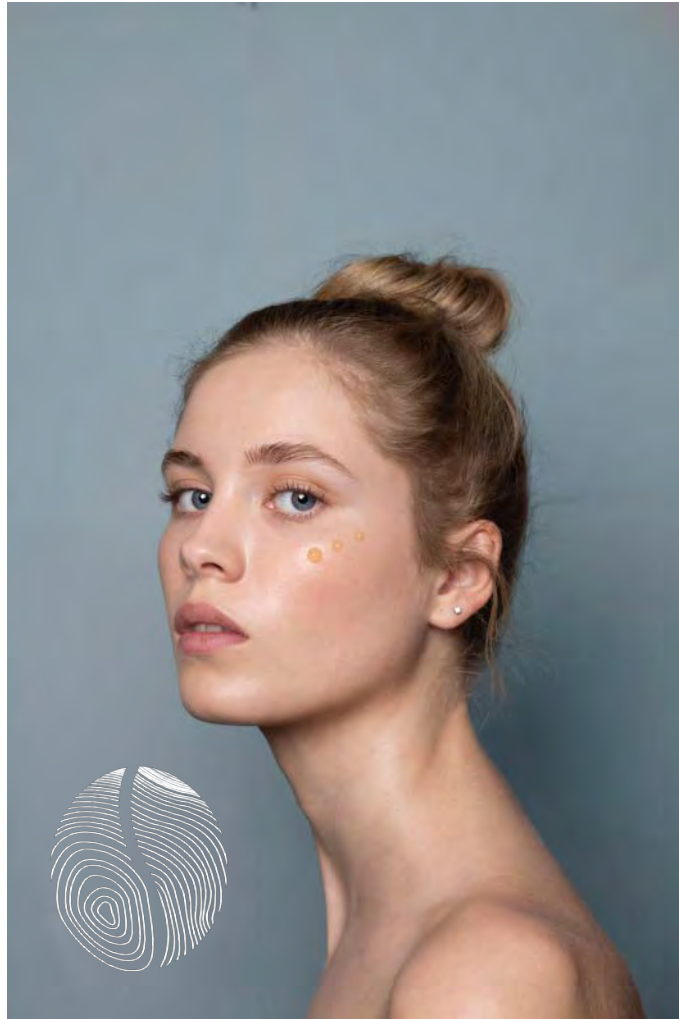
Results

A relevant reduction of ROS production is observed by – 43%, 54% with KAFFOIL™ at 0.1%, and 0.2% respectively, demonstrating high antioxidant properties.

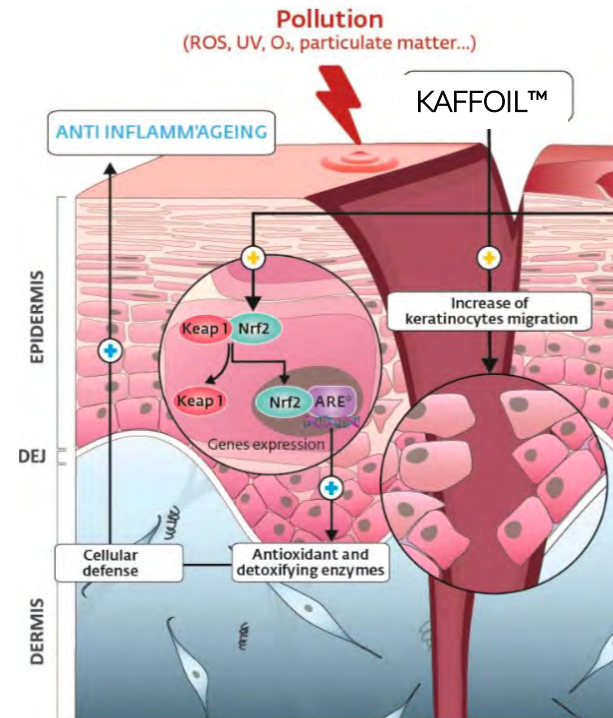


KAFFOIL™

Skincare summary



Mode of action



Summary of skin benefits

1. Skin Repair: increase of keratinocytes migration
2. Antioxidant: activation of Nrf2 pathway and reduction of ROS production

KAFFOIL™

Real consumer case (not an in vivo study)



5% KAFFOIL™



KAFFOIL™

In vivo

In vivo data on body coming in 2023 –
Skin elasticity and moisturising.



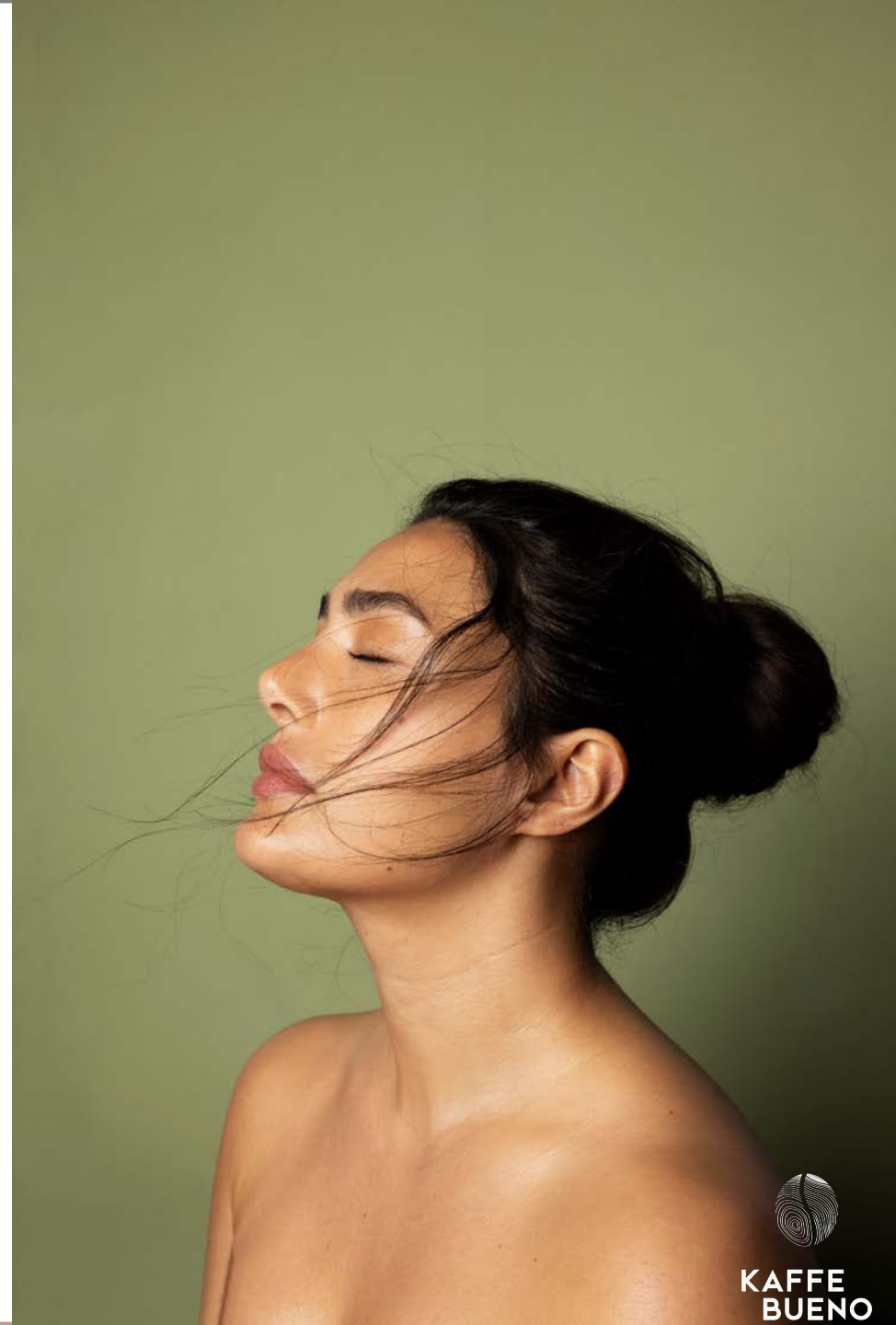
KAFFOIL-R™ - The New Argan Oil

Product Code: 01003

- KAFFOIL-R™ is our new, refined version. Available from today.
- Lighter smell and colour than KAFFOIL™
- No changes in specifications between two versions.
- Targeted for hair and body applications.



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Why does the industry need a new Argan Oil?

- Argan oil is effective, but,
- Women farmers are exploited instead of empowered,
- Deforestation increasing
- It is only produced in Morocco



The Argan way: centralised production



The Bueno way: decentralised upcycling



Production scale-up

Kaffe Bueno aims to build a decentralised network of biorefineries worldwide, to source upcycled raw material and supply ingredients locally

- **Step 1:** R&D lab in Copenhagen fully up & running
- **Step 2:** Currently building 1st pilot biorefinery (500 T full supply guaranteed) in Denmark (will be achieved with EIC grant)
- **Step 3:** Next step demo plant 5-10,000 tons in Spain (or bigger EU or US) country by 2027.

Raw material

- Industrial coffee side-streams and post-consumption by-products, mapped network of coffee waste in Europe, US and South America
- Not reliant on new crops, but rather use what is already out there. Rising coffee consumption particularly cold brew and RTD beverages, in US and Asia.
- Help manufacturers, reduce carbon footprint of their products by enabling the substitution of petrochemicals with natural ingredients. Plus, decentralised production will enable reduction of transport emissions, as we set up biorefineries in proximity to our customers.

Back to KAFFOIL-R™

Product Code: 01003

- Used in 100% naturally derived hair oil formulations at 2% and 5%.
- Included same formulations replacing KAFFOIL-R™ for Argan Oil.
- Performed randomised ex vivo for the evaluation of efficacy in hair repair, breakage, prevention and repair of split ends, and hair shine.





KAFFOIL-R™
EFFICACY DATA

HAIR

Ex vivo – Study plan

Objective

To evaluate ex vivo the effect of two cosmetic ingredients with different concentrations on hair breakage, split ends and hair shine after one single products' application, comparatively to a placebo. Reasons for testing on Brazillian hair.

10 Straight hair tresses and 10 Brazilian hair tresses are evaluated for each of the following conditions:

| | |
|-------------|---|
| Condition 1 | Without damage |
| Condition 2 | With damage |
| Condition 3 | With damage + treatment with investigational product (one formulation with KAFFOIL-R™ at 2%) |
| Condition 4 | With damage + treatment with investigational product (one formulation with KAFFOIL-R™ at 5%) |
| Condition 5 | With damage + treatment with investigational product (one formulation with Argan Oil at 2%) |
| Condition 6 | With damage + treatment with investigational product (one formulation with Argan Oil at 5%) |
| Condition 7 | With damage + treatment with placebo product (one formulation without the active ingredients) |

Ex vivo – Hair Types

We decided to perform the test in different hair types: straight and Brazilian, because this would increase the relevance of our results to a wider audience.

Brazilian hair is characterised for being more wavy and thick, whereas the straight hair is thinner.

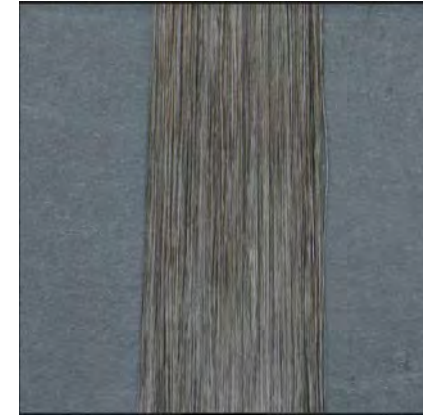
Due to the physical characteristics of Brazilian hair, daily combing has a more aggressive impact on it, causing more breakage and split ends than for straight hair.



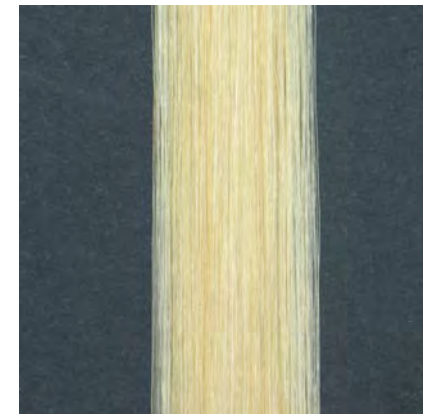
Ex vivo – How Bleaching Damages the Hair Structure

- Bleach penetrates the hair structure and within it, reacts with the stable pigment molecules, breaking them into compounds which are then washed out.
- This oxidation process, which removes not only the pigment molecules but also essential fatty acids, significantly damages the hair fibres and leaves hair weaker, damaged, susceptible to breakage, and porous.

Undamaged



Damaged



Ex vivo – Study plan

Methods

| | |
|----------|---|
| Method 1 | Damage = bleaching |
| Method 2 | Breakage and split ends: 5,000 brush strokes (combings) with mechanical apparatus at 60 rpm. Each hair tress goes under this procedure for 1.5 hours. |
| Method 3 | Evaluation of breakage: count number of hairs broken |
| Method 4 | Evaluation of split ends: microscopic photographs of the end tip of six hair fibres from each type of hair (Straight hair Brazilian hair) and each condition, previously collected from hair tresses which have been under the combing standard procedure and, when applicable, after products' application (only conditions 3 to 7). |
| Method 5 | Evaluation of hair shine: visual scale |
| Method 6 | Application of investigational product: wash and dry hair tresses, then apply evenly 20 μ L/g of test/control products in a downward direction to the hair tress with a syringe, massage 30 seconds, let it rest for 30 mins. |



Figure 3. Mechanical Styling Apparatus

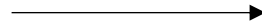
Table 1. Visual hair shine score and respective description

| Score | 1 | 2 | 3 | 4 | 5 |
|------------|--|--|--|--|--|
| | None | Low | Average | High | Very High |
| Hair Shine |  |  |  |  |  |

Ex vivo study

Test product with KAFFOIL-R™ (01003)

Test Products



- 3. Natural hair oil with 2% KAFFOIL-R™ (used in Condition 3)
- 4. Natural hair oil with 5% KAFFOIL-R™ (used in Condition 4)



Ex vivo study

KAFFOIL-R™ (01003) Formulations

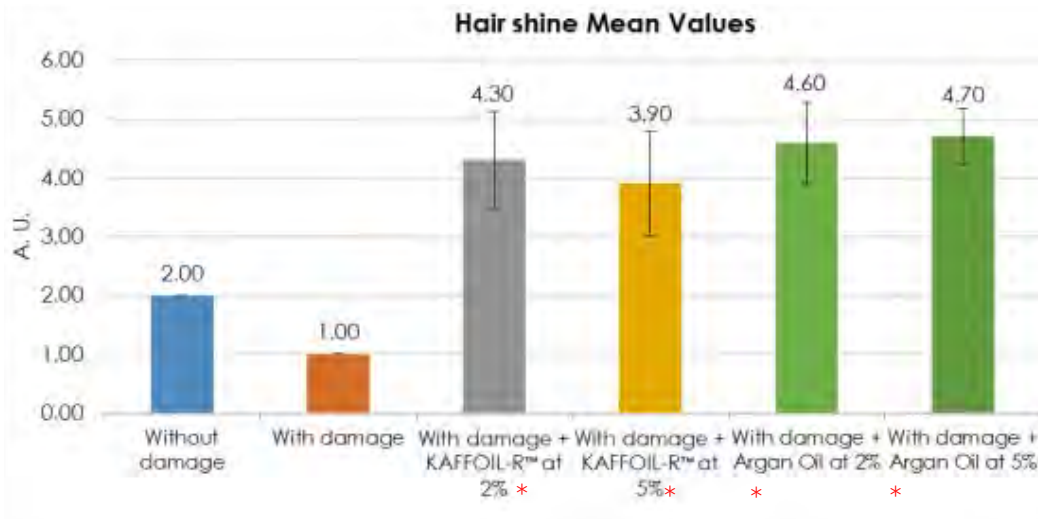
| INGREDIENT (INCI NAME) | NO-3 | NO-4 |
|---|------|------|
| KAFFOIL-R™ | 2 | 5 |
| Shea Butter Ethyl Esters | 15 | 15 |
| Polycitronellol Acetate, Undecane and Tridecane | 55 | 54 |
| Polycitronellol Acetate | 28 | 26 |



Ex vivo study

Results – Hair Shine

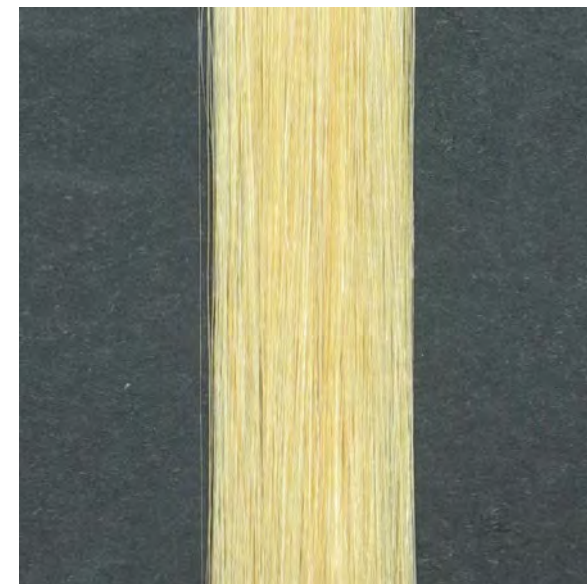
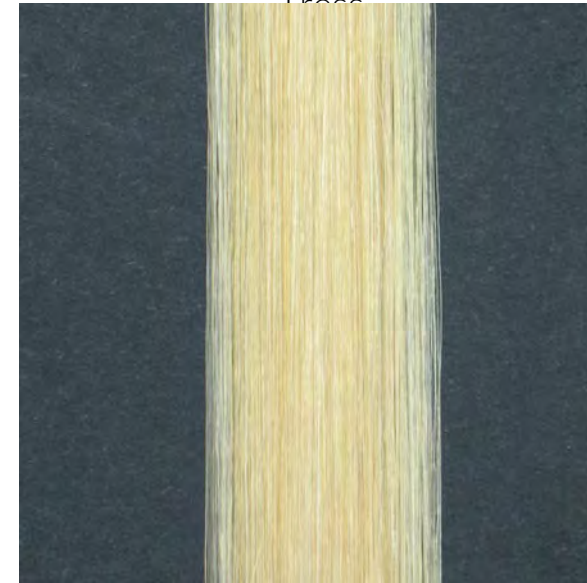
Straight Hair Tresses



Mean results of the straight tresses' shine after products' application

*Statistical significant difference found

Condition 2 – Damaged Straight Tress

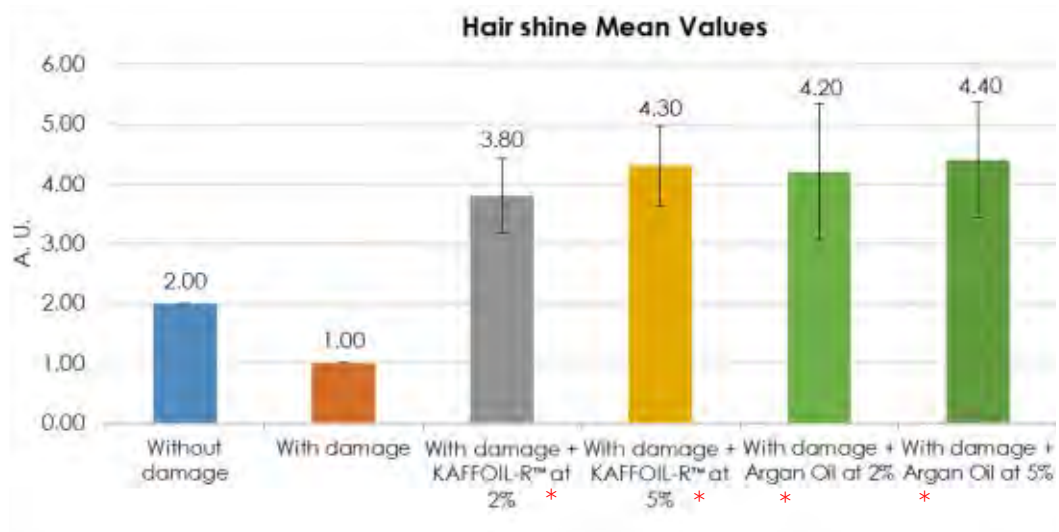


Condition 3 – Damaged Straight Tress after treatment with 2% KAFFOIL-R™

Ex vivo study

Results – Hair Shine

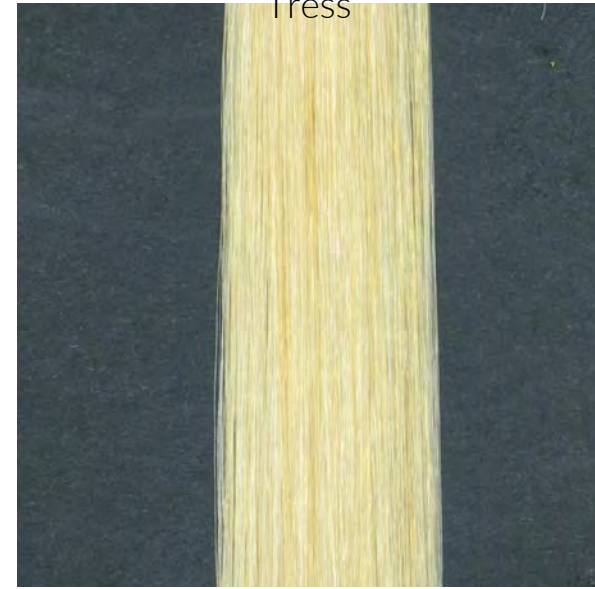
Brazilian Hair Tresses



Mean results of the Brazilian tresses' shine after products' application

*Statistical significant difference found

Condition 2 – Damaged Straight Tress



Condition 4 – Damaged Straight Tress after treatment with 5% KAFFOIL-R™

Ex vivo study

Conclusions – Hair Shine

Straight Hair Tresses

Conclusions:

Clear tendency for all investigational products to induce a lower number of broken hairs after application when comparing with tresses with damage (condition 2).

No statistically significant difference between tresses treated with KAFFOIL-R™ at different concentrations or Argan oil.

This means they had the same effect.

Brazilian Hair Tresses

Conclusions:

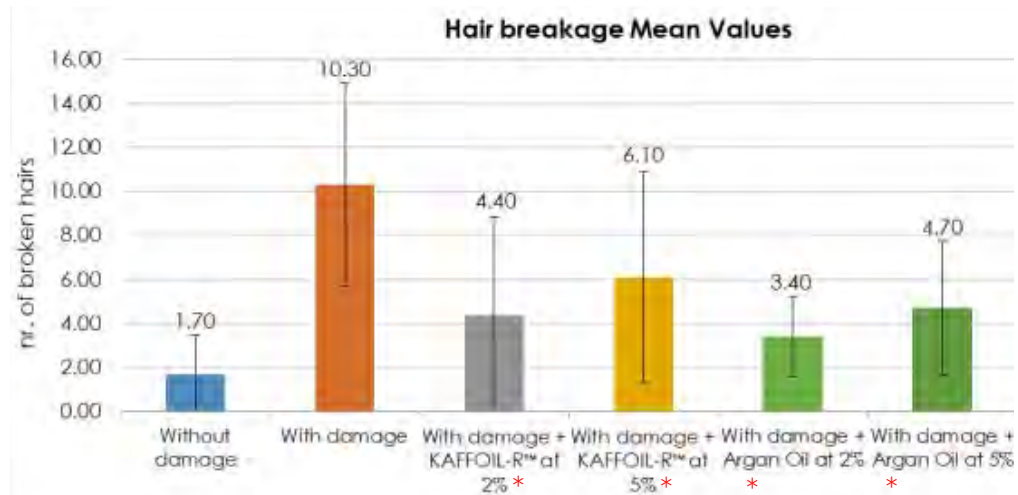
Statistically significant differences were found when comparing hair shine results obtained after the treatment of damaged tresses with placebo product vs. results obtained after damaged tresses were treated with KAFFOIL-R™ at 5%.

Hair shine in damaged tresses treated with the formulation using 5% KAFFOIL-R™ was higher than in those treated with 2% of KAFFOIL-R™

Ex vivo study

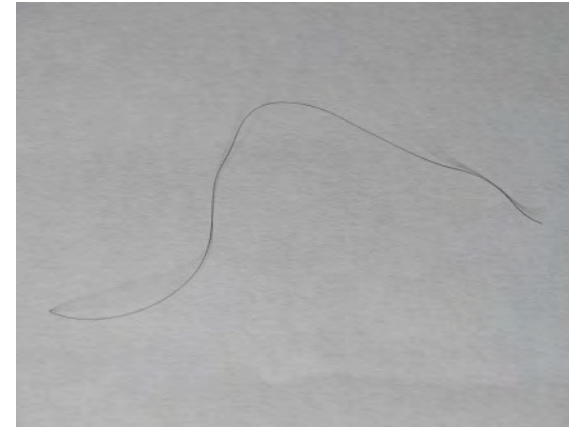
Results – Hair Breakage

Straight Hair Tresses



Mean results of the number of broken hairs after products' application and after the combing standard procedure for straight tresses.

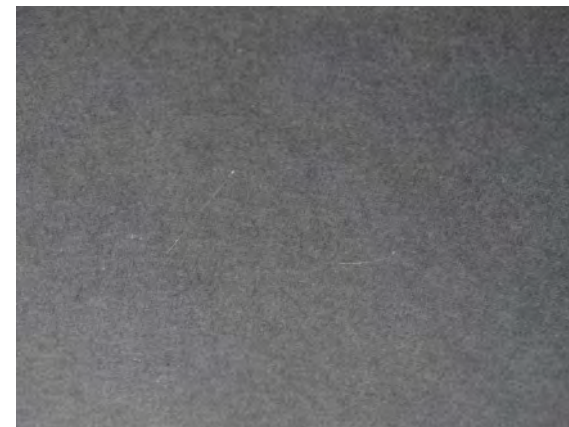
*Statistical significant difference found



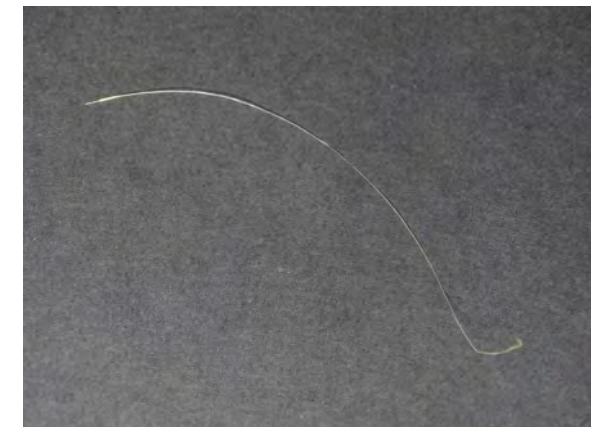
Photograph of a broken hair of straight tress without damage (condition 1).



Photograph of a broken hair of straight tress with damage (condition 2).



Photograph of a broken hair of straight tress with damage and treatment with KAFFOIL-R™ at 2% (condition 3).

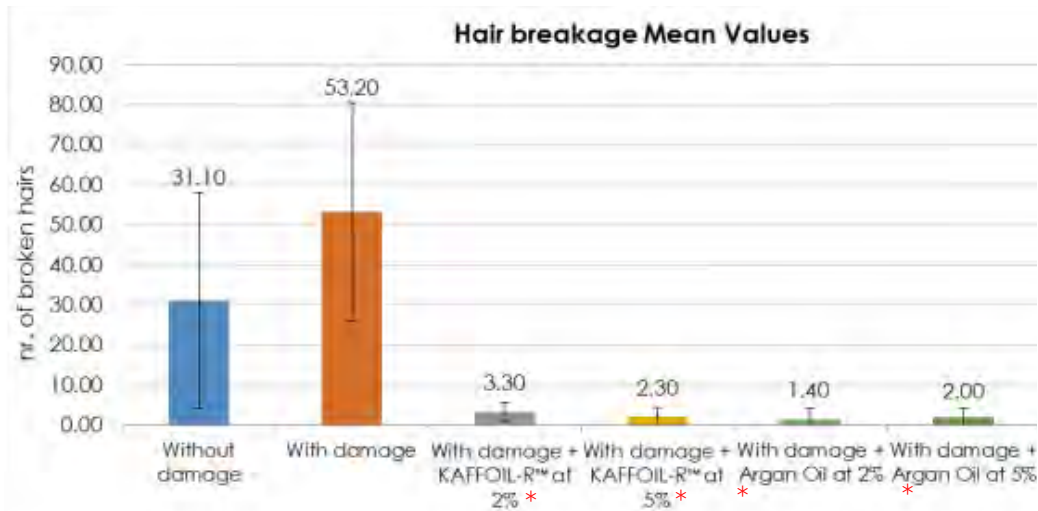


Photograph of a broken hair of straight tress with damage and treatment with KAFFOIL-R™ at 5% (condition 4).

Ex vivo study

Results – Hair Breakage

Brazilian Hair Tresses



Mean results of the number of broken hairs after products' application and after the combing standard procedure for straight tresses.

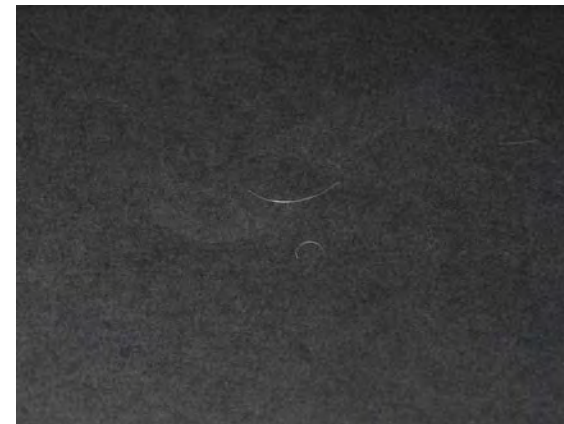
*Statistical significant difference found



Photograph of a broken hair of Brazilian tress without damage (condition 1).



Photograph of a broken hair of Brazilian tress with damage (condition 2).



Photograph of a broken hair of Brazilian tress with damage and treatment with KAFFOIL-R™ at 2% (condition 3).



Photograph of a broken hair of Brazilian tress with damage and treatment with KAFFOIL-R™ at 5% (condition 4).

Ex vivo study

Conclusions – Hair Breakage

Straight Hair Tresses

Conclusions:

Clear tendency for all investigational products to induce a lower number of broken hairs after application when comparing with tresses with damage (condition 2).

No statistically significant difference between tresses treated with KAFFOIL-R™ and Argan oil. This means they had the same effect.

Brazilian Hair Tresses

Conclusions:

Clearly, because of the type of hair, the combing had a more aggressive impact on the hair tresses, whether damaged or not.

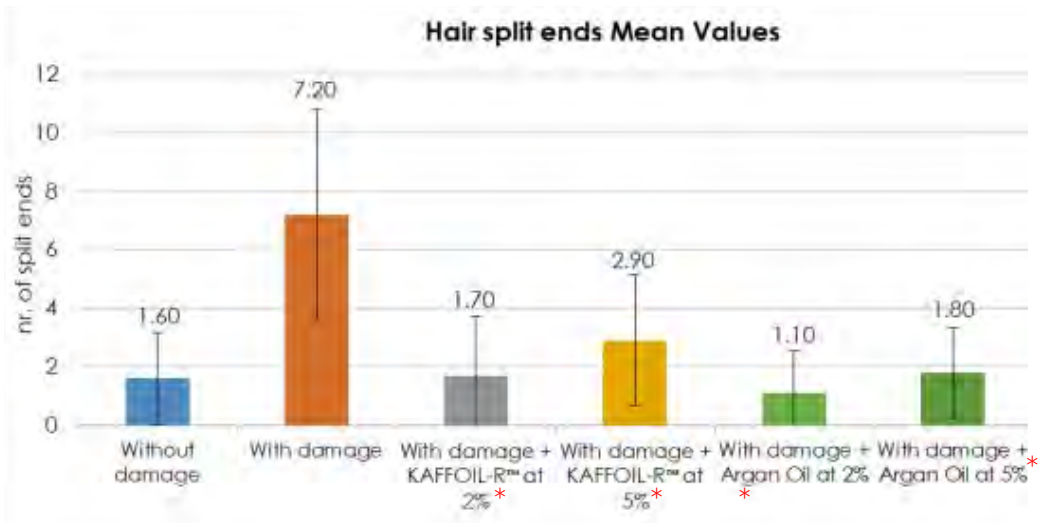
Clear tendency for all investigational products to induce a lower number of broken hairs after application when comparing with tresses with damage (condition 2).

No statistically significant difference between tresses treated with KAFFOIL-R™ and Argan oil. This means they had the same effect.

Ex vivo study

Results – Split Ends (Prevention)

Straight Hair Tresses



Mean results of the number of hair split ends in the hair tresses (prevention) after products' application for straight tresses.

Put asterisk in significant difference

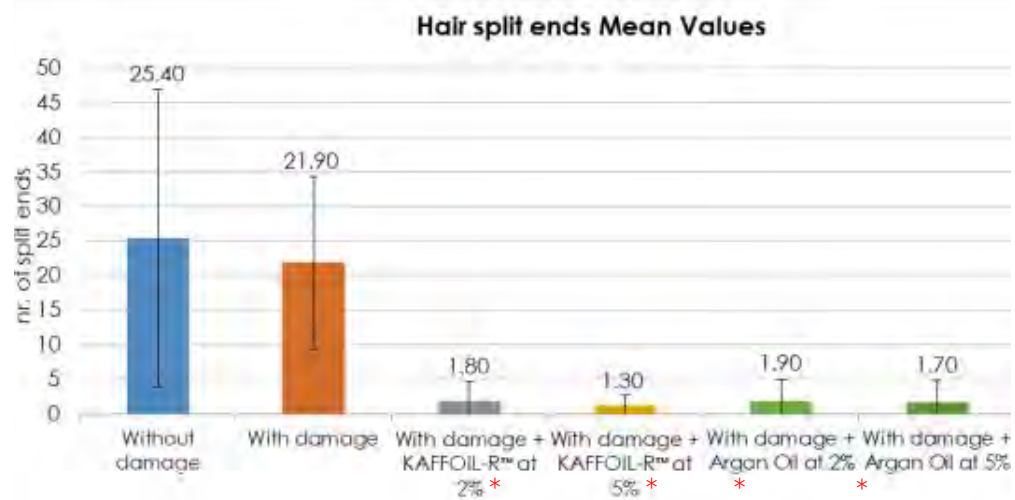
*Statistical significant difference found

| Score | 1 | 2 | 3 | 4 | 5 |
|-------------|--------------------|---|---|---|--|
| Description | Without split ends | Split ends total area presence greater than 0% and equal or lower than 25% (>0% - ≤25%) | Split ends total area presence greater than 25% and equal or lower than 50% (>25% - ≤50%) | Split ends total area presence greater than 50% and equal or lower than 75% (>50% - ≤75%) | Split ends total area presence greater than 75% (>75%) |

Ex vivo study

Results – Split Ends (Prevention)

Brazilian Hair Tresses



Mean results of the number of hair split ends in the hair tresses (prevention) after products' application for Brazilian tresses.

*Statistical significant difference found

| Score | 1 | 2 | 3 | 4 | 5 |
|-------------|--------------------|---|---|---|--|
| Description | Without split ends | Split ends total area presence greater than 0% and equal or lower than 25% (>0% - ≤25%) | Split ends total area presence greater than 25% and equal or lower than 50% (>25% - ≤50%) | Split ends total area presence greater than 50% and equal or lower than 75% (>50% - ≤75%) | Split ends total area presence greater than 75% (>75%) |

Ex vivo study

Conclusions – Split ends (prevention)

Straight Hair Tresses

Conclusions:

Clear tendency for all investigational products to induce a lower number of split ends after application when comparing with tresses with damage (condition 2).

No statistically significant difference between tresses treated with KAFFOIL-R™ at different concentrations or Argan oil.

This means they had the same effect.

Brazilian Hair Tresses

Conclusions:

Clear tendency for all investigational products to induce a lower number of split ends after application when comparing with tresses with damage (condition 2).

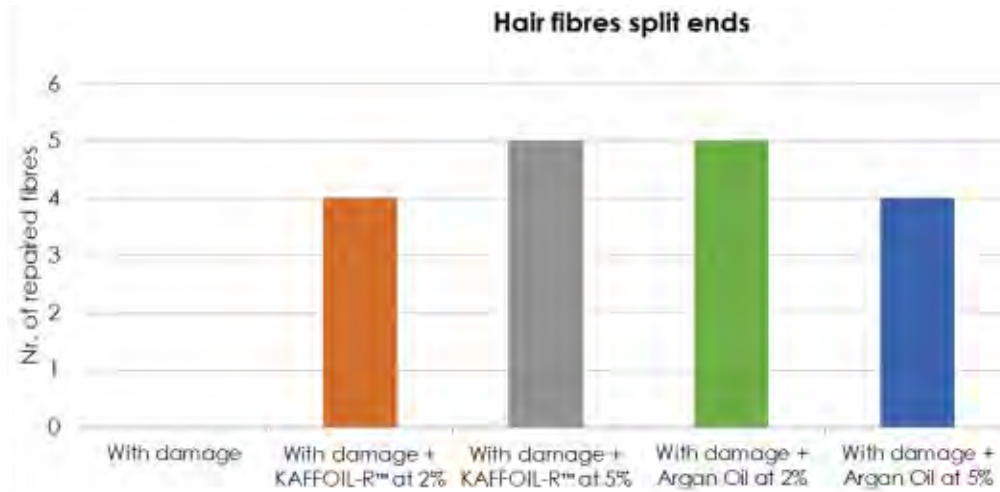
No statistically significant difference between tresses treated with KAFFOIL-R™ at different concentrations or Argan oil.

This means they had the same effect.

Ex vivo study

Results – Split Ends (Repair)

Straight Hair Tresses



Number of repaired split ends (from 6) obtained after products' application for straight tresses.



Representative images of damaged hair fibres of straight tress with damage (condition 2).

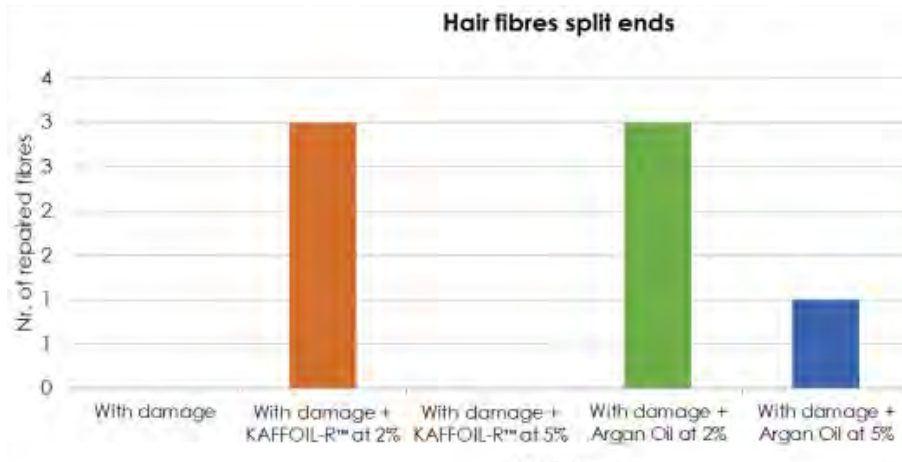


Representative images of damaged hair fibres of straight tress with damage after treatment with KAFFOIL-R™ at 5% (condition 4).

Ex vivo study

Results – Split Ends (Repair)

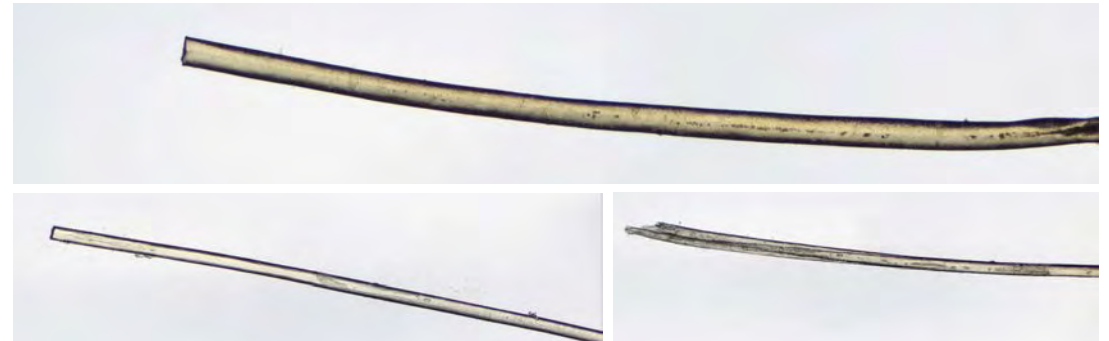
Brazilian Hair Tresses



Number of repaired split ends (from 6) obtained after products' application for Brazilian tresses.



Representative images of damaged hair fibres of Brazilian tress with damage (condition 2).



Representative images of damaged hair fibres of Brazilian tress with damage after treatment with KAFFOIL-R™ at 2% (condition 3).

Ex vivo study

Conclusions – Split ends (repair)

Straight Hair Tresses

Conclusions:

Clear tendency for all investigational products to repair the hair fibres' split ends after application when comparing with tresses with damage (condition 2).

No statistically significant difference between tresses treated with KAFFOIL-R™ at different concentrations or Argan oil.

This means they had the same effect.

Brazilian Hair Tresses

Conclusions:

Clear tendency for all investigational products to repair the hair fibres' split ends after application when comparing with tresses with damage (condition 2).

No statistically significant difference between tresses treated with KAFFOIL-R™ at different concentrations or Argan oil.

This means they had the same effect.

Ex vivo study

Conclusions – Overall

Straight Hair Tresses

Conclusions:

The formulation with KAFFOIL-R™ at 2% had a significant effect on the hair breakage, hair shine, on the prevention and repair of split ends. Its effect was similar to the one caused by the formulation with Argan oil at 2%.

No differences were found between the formulation with KAFFOIL-R™ at 2% and the formulation with KAFFOIL-R™ at 5%.

Brazilian Hair Tresses

Conclusions:

The formulation with KAFFOIL-R™ at 2% had a significant effect on the hair breakage, hair shine, on the prevention and repair of split ends. Its effect was similar to the one caused by the formulation with Argan oil at 2%.

The formulation with KAFFOIL-R™ at 5% had significant effect on the hair breakage, hair shine and repair of split ends. While it performed better for hair shine than the one using 2%, the latter had a greater effect in preventing split ends.



NEW LAUNCHES



SKIN, HAIR, SUN

KAFFAGE™

An upcycled Multi-functional Active Phenolic Extract

KAFFAGE™ is an upcycled amphiphilic polyphenolic fibre derived from coffee.

Thanks to KAFFAGE™'s high contents of hydroxycinnamic acids enable a high antioxidant activity, plus prevents UV-induced glycation in human cells.

KAFFAGE™ absorbs UV light in the UVA, UVB, and UVC wavelengths, making it a natural SPF booster.

Its natural emulsifying properties make it easy to formulate with, while its antimicrobial properties reduce the need for preservatives. Use KAFFAGE™ in BB Creams, Foundations, Skin and Body Care.

EFFICACY DATA

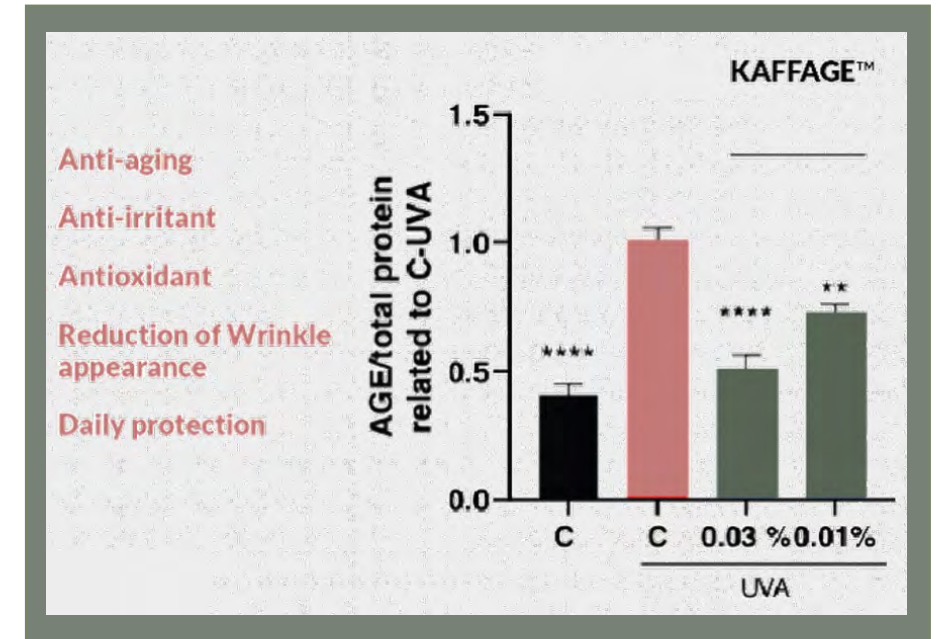
The in vitro exposure of human keratinocytes (HaCaT) to KAFFAGE™ at a 0.01-0.03% concentration for 24 hours does not affect the cell viability and is extremely well tolerated.

The 0.01-0.03% concentration was sufficient to prevent the damaging effects of UVA exposure for 3 hours and 30 minutes (20 J/cm²) in vitro. The relative presence of glycated proteins due to UVA radiation for more than 3 hours was reduced by 49.6% by the presence of 0.03% KAFFAGE™ and reduced by 28.3% by the presence of 0.01% KAFFAGE™ in human skin cells in vitro.

The presence of 0.03% KAFFAGE™ resulted in levels of glycated proteins (AGEs) equal to non-UV-irradiated cells. KAFFAGE™ (0.03% concentration) neutralized the damaging effects of UV exposure in skin cells in vitro. The presence of 0.03% KAFFAGE™ prevented the aging process due to the exposure to UVA for more than 3 hrs on skin cells in vitro.

Results:

The in vitro treatment of human keratinocytes (HaCaT) with KAFFAGE™ at 0.01 % and 0.03 % for 24 hours prevents significantly the accumulation of UVA-induced glycated species.



KAFFAIR™

Upcycled Active for Hair & Scalp Care

KAFFAIR™ is a patent-pending active scalp and hair treatment upcycled from coffee.

It cleanses hair fibres from environmental pollutants, thanks to its strong metal chelating properties. Meanwhile, protecting the hair and scalp from UV damage.

While it has natural coffee-derived hues, it does not dye the hair.

KAFFAIR™ efficacy data is ongoing.

Use KAFFAIR™ in Shampoos, Conditioners, Hair masks, Scalp oils, and Scalp Revitalisers.





KA-ZuN™

An Upcycled Broad Spectrum Upgraded UV Filter

KA-ZuN™ is an upcycled mineral UV filter consisting of a Zinc Oxide (ZnO) molecule coated with a Kaffe Bueno proprietary bioactive fibre. This coating boosts SPF, while reducing the photocatalytic activity of ZnO and reducing the undesirable white cast effect.

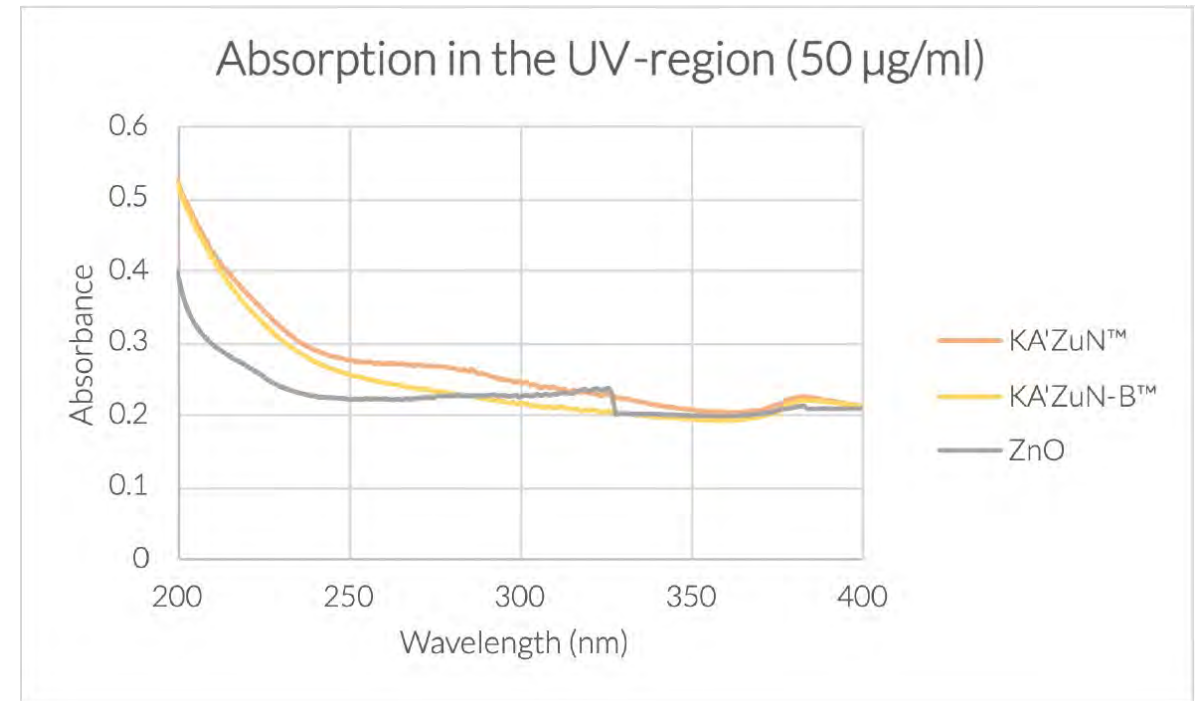
Use KA-ZuN™ in inclusive sunscreens, bronzers and after sun care.

EFFICACY DATA

Similar to that of KAFFAGE™, KA-ZuN™ absorbs light in the UV-region, making it a natural sunblocker. Here different versions of KA-ZuN™, KA-ZuN™ and KA-ZuN-B™, were compared to Zinc Oxide (ZnO).

In the UV-B region (280-315nm) both KA-ZuN™ versions outperformed the ZnO. However in the UV-A region (315-380nm) there was a clear effect of the ZnO which can be observed in the graph.

Zinc oxide acts as a physical sun blocker and further enhances KA-ZuN's™ sun protecting properties. Overall, both KA-ZuN™ versions performed equally as well as ZnO.



Awards & media coverage

Awards



GEM Entrepreneurs of The Year 2021 – to the founders of Kaffe Bueno



Winner in 'Future of Snacking' at Seeds & Chips Global Summit 2019



360 Degrees Prize Startup of The Year, 2018. by Danish Chamber of Commerce



Winner, People's Choice Awards 2018

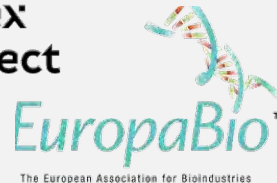


Runner Up as Most Innovative Industrial Biotech SME in Europe 2018



InnovationKonkurrence (Biomass Innovation Competition): Winner 2017

Press





THANK YOU!

Certified



Corporation

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