©are reations...



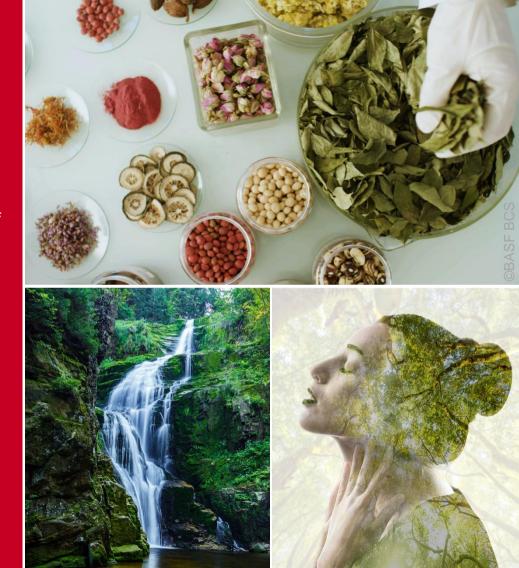
BASF Beauty Creations: Active ingredients from the extraction and processes platform



## Extraction & Processes Platform

The perfection and the diversity of nature remain BASF Beauty Creations' number one source of inspiration. Each plant, each molecule possesses its own uniqueness and offers treasures of ingenuity. From the tiniest drop of water to the most ancestral tree, infinite sources of power and creativity are right there before our very eyes. All we have to do is open them...

What if all that power and protective genius was transferable to our Beauty?







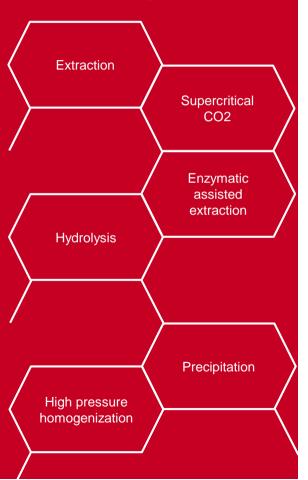


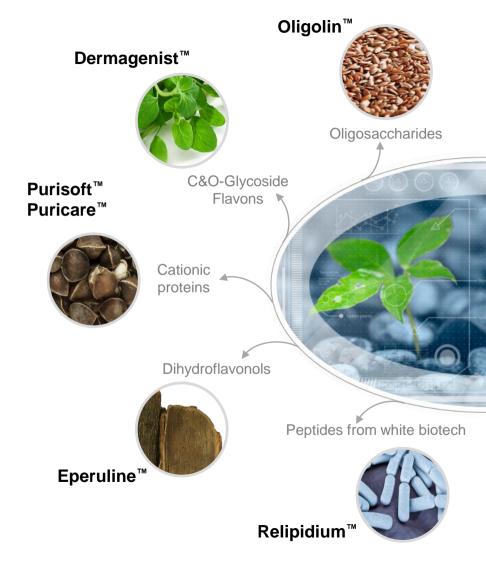
Answering this question pushed Beauty Creations to create an extraction and processes platform, dedicated to the selection and enhancement of nature's secrets. In an environment with increased regulatory scrutiny, we regard them as a fantastic source of innovation.

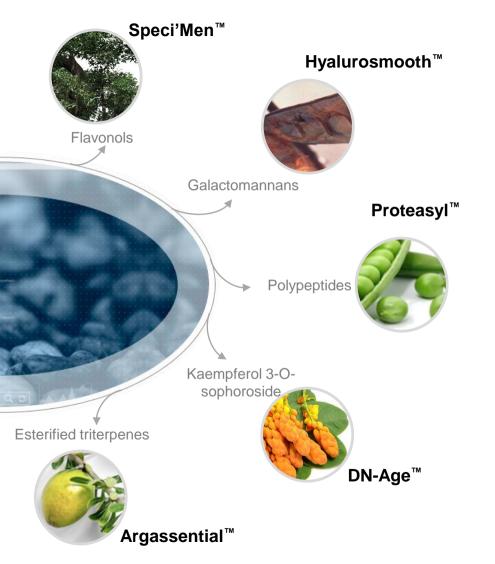
Over the years, we have perfected our expertise and processes to create value added products our customers expect: unique active molecules suited to work with the innovative textures developed by our formula teams.

Investing in these sustainable processes paid off. We have developed novel solutions that unlock the secrets from nature to address consumer needs by delivering fast, visible results

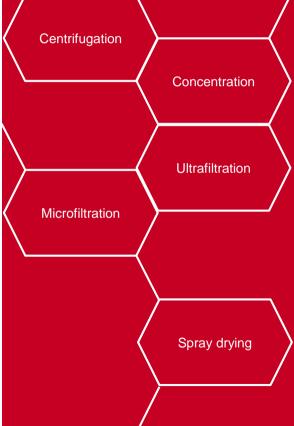
### **BASF Beauty Creation processes**







### **BASF Beauty Creation processes**

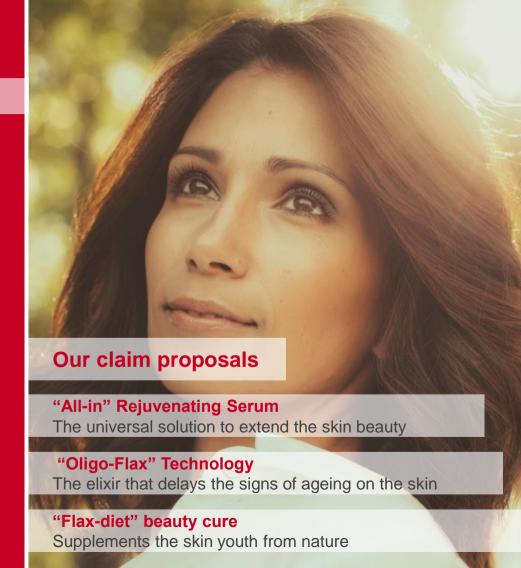


#### Oligolin™

#### Concept

Longer life expectancy brings with it a unique set of consumer needs. The ageing process has multiple consequences: skin loses its capacity to restructure, whereby firmness and density are compromised.

A universal solution to addressing multiple signs of aging, Oligolin<sup>™</sup>, is the singular rejuvenating aid that prolongs the skin's beauty.





### A concentrated extract leveraging the botanical power of linseed



# Flax oligosaccharides for skin restructuring

Obtained via a unique, patented, purification process, Oligolin™ comprises of high-molecular weight, natural oligosaccharides from flaxseeds.

The specific extraction of soluble polysaccharides combined with controlled hydrolysis provides active oligosaccharides.

Oligolin<sup>™</sup> is delivered in the form of a highly concentrated, non-preserved powder with versatile anti-ageing and moisturizing benefits.

#### Oligolin<sup>™</sup> Main Results





#### **SKIN HYDRATION**

+ 43% Epidermis Thickness

- **59%** Hyaluronidase

Hyaluronic acid protection

#### After 28 days:

**+** 11%

Hydration

#### **SKIN FIRMNESS**

+ 34% Fibroblast proliferation

+ 56% Collagen I

+ 63% Collagen III

**+** 14%

**Firmness** 



### Oligolin<sup>™</sup> Product Characteristics





#### Oligolin™

BC10028

INCI: Hydrolyzed Linseed Extract

Dose of use: 1%

Preservative free





Mean molecular weight in the range of 20-30 kDa

Main oligosaccharide monomers : Xylose, Galactose, Glucose and Rhamnose.

Total carbohydrate content > 40%

Linum usitatissimum

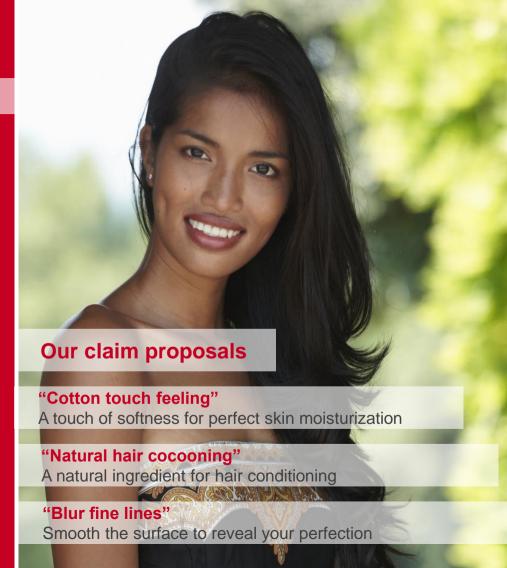


#### **Hyalurosmooth**

#### **Concept**

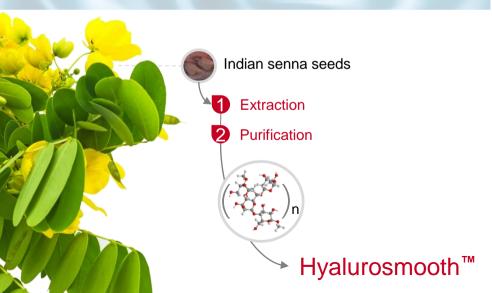
Smoothing and filling of fine lines and wrinkles by injecting «fillers» such as hyaluronic acid has become increasingly popular. For those who would rather avoid needles or who prefer a more natural and «holistic» approach, we have developed Hyalurosmooth™.

Hyalurosmooth™ is a natural polysaccharide that forms a protective film on skin and hair. It binds to water providing intense moisturization and filling fine lines on skin's surface. As a result, skin appears smoother and hair easier to comb.





### Like hyaluronic acid, attracting and binding to water



## Ultrapure galactomannans for silky skin and hair care

Naturally rich in polysaccharides, the Mediterranean shrub *Cassia angustifolia*, also known as Alexandrian Senna, is an ideal source of galactomannans. Following their isolation and separation from the seeds of the Senna shrub, galactomannans are purified by appropriate enzymatic treatment.

The resulting ultrapure galactomannans that make up Hyalurosmooth™, not only provide skin moisturizing and hair conditioning properties but also give cosmetic formulations a smooth, velvety soft skin feel.

#### Hyalurosmooth<sup>™</sup> Main Results



**EPIDERMIS HYDRATION** 

+35% Hydration after 24h

IMMEDIATELY PERCEIVABLE SKIN BENEFITS

**+21%** Softness

+26% Suppleness

**+23%** Hydration



HAIR CONDITIONING

**-23%** Combing work

**-34%** Maximum combing force



Placebo Shampoo containing 3 shampoo % Hyalurosmooth™ LS 8998 \*



### Hyalurosmooth<sup>™</sup> Product Characteristics





#### Hyalurosmooth™

| LS 8998   | PW LS 8997  |
|---|---|
| INCI:<br>Aqua (and) Cassia<br>Angustifolia Seed<br>Polysaccharide | INCI:<br>Cassia Angustifolia<br>Seed Polysaccharide |
| Dose of use: 2.5 to 5%  | Dose of use: 0.05 to 0.1%                           |
|   | Preservative free                                   |

#### Total sugars:

- > 1.5 % (LS 8998)
- > 85 % (PW LS 8997)

#### Composition of sugars:

- ≥ 50% mannose
- ≥ 15% galactose





Cassia angustifolia



#### Relipidium™

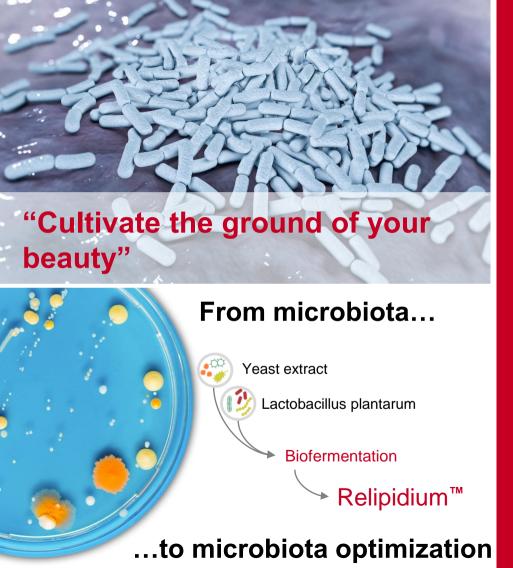
#### Concept

When exposed to environmental stressors, skin becomes more sensitive with higher irritation potential.

An impairment of the skin's barrier function disrupts the cutaneous ecosystem and alters its natural microbial biodiversity.

To reverse this vicious circle and correct skin dryness, we have developed Relipidium.





### Only biotechnology could achieve it

Microorganisms are an exceptional source of diversity due to the efficient enzymatic machinery they have developed to adapt quickly to changing environments.

Our biotechnology experts have selected a specific yeast extract, which is bio-fermented by our exclusive strain of Lactobacillus plantarum to create Relipidum™.

The unique peptide and shortchain fatty acid profile of Relipidum™ has not only demonstrated skin moisturizing properties but also delivered microbiota-balancing properties in vivo.

#### Relipidium<sup>™</sup> Main Results





#### BARRIER FUNCTION RECOVERY

+ 94% Ceramides synthesis

+ 20% Barrier recovery

#### STRENGTHENED SKIN DEFENCES

X 10

Dectin-1a & TLR2 Activation

#### **REBALANCED SKIN MICROFLORA**

**X2** 

Commensal germs S. epidermidis

X2.3

S. epidermidis / S. aureus ratio



### Relipidium<sup>™</sup> Product Characteristics





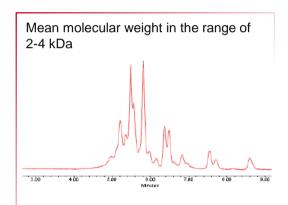
#### Relipidium™

A00265

INCI:

Hydrolyzed Yeast Protein (and) Butylene Glycol (and) Pentylene Glycol

Dose of use: 1 to 2%



Main peptidic amino-acids : Asp, Ala, Lys, Leu, Val, Arg.





Lactobacillus bacteria



#### **Proteasyl**<sup>™</sup>

#### Concept

When we are young, skin's regenerative processes are more powerful than the destructive ones, resulting in youthful and glowing appearance. With ageing, this process tends to reverse and wrinkles appear.

To maintain the youthful appearance it is equally important to reduce the destructive processes while stimulating regenerative ones.

As a multifunctional anti-ageing active ingredient, we have developed Proteasyl™, a polypeptidic fraction obtained by an exclusive extraction and purification technology from garden pea.



"Multi-regenerative elixir"

Rebalance skin processes to recover skin youth appearance



### A pea extract like no other

Recognized as a valuable source of protein by the Food and Agriculture Organization, *Pisum sativum* has been cultivated since ancient times for its nutritional qualities.

Working closely with academic agronomists, BASF's botanists have selected a unique variety of winter pea, which offers a high anti-protease content.

Available in both powder and liquid forms, Proteasyl™ is a non-GMO product with a titrated and anti-protease activity for global skin restructuring and antiageing benefits.

#### Proteasyl<sup>™</sup> Main Results





#### **IMPROVED ELASTICITY AND FIRMNESS**

**+16%** Elasticity **+35%** Firmness

#### **COLLAGEN SYNTHESIS STIMULATION**

**X1,4** Collagen V **X1,7** Collagen V

#### **ELASTIC FIBERS PROTECTION & BOOSTER**

+ 50% Papillary elastic fibers protection

+ 35% Reticular elastic fibers protection

x12
Elastin



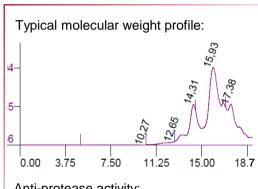
### Proteasyl<sup>™</sup> Product Characteristics





#### Proteasyl™

| TP PME LS 9818   | PW PSE LS 8951                                       |
|--|--|
| INCI:<br>Water (and)<br>Glycerin (and)<br>Pisum Sativum<br>(Pea) Extract | INCI: Pisum Sativum (Pea) Extract (and) Cyclodextrin |
| Dose of use: 1 to 3%   | Dose of use: 0.2 to 0.5%                             |
|  | Preservative free                                    |
| China 🗸  | China  |



Anti-protease activity:

- > 2 IU (TP POE LS 9818)
- ≥ 45 IU (PW PSE LS 8951)











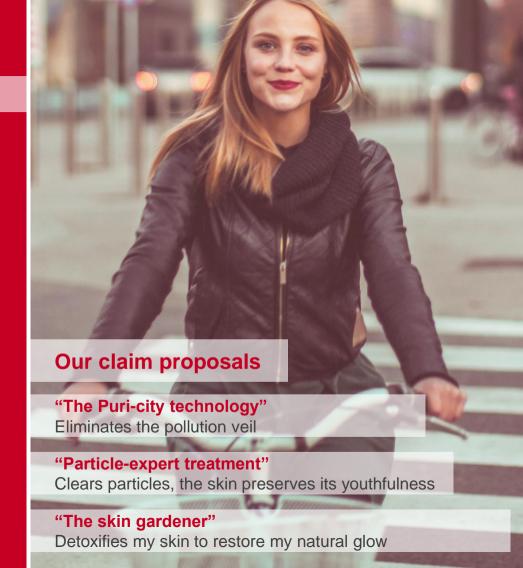
#### Purisoft™

#### **Concept**

In our modern world, the lifestyle of active women may lead to unexpected skin problems caused by stress and pollution.

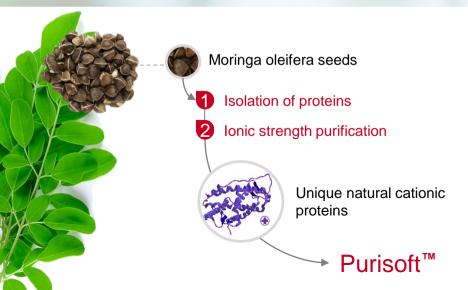
Day after day, our skin is directly exposed to these environmental attacks. Pollution particles cover the skin with an invisible veil and asphyxiate it. The effects are dull, dry, wrinkled skin with loss of tonicity and firmness.

Purisoft<sup>™</sup> has been developed to provide essential defense against the effects of pollution and purify skin.





### Let the skin breathe again for a flawless, glowing complexion



### The miracle proteins

Crushed Moringa oleifera seeds have a unique ability to aggregate and precipitate particulate matter and are hence much-valued for water purification in regions with limited access to usable water.

The BASF plant extraction team has developed a manufacturing process that makes it possible to isolate and purify the cationic proteins that bear the depolluting properties of Moringa seeds.

Enriched with these proteins, Purisoft<sup>™</sup> delivers anti-pollution benefits to skin

#### Purisoft™ **Main Results**





#### **PURIFY SKIN**

X 8

Easier removal of dirt particles

#### FIGHT INDUCED INFLAMMATION

- 48% Inflammation caused by PM2.5 & UV

#### PROTECT AGAINST OXIDATIVE STRESS

- 51% Intracellular ROS

- 39% Lipid peroxidation



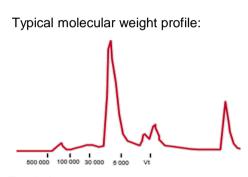
### **Purisoft**<sup>™</sup> **Product Characteristics**





#### Purisoft™

| LS 9726  | PW PSE LS 9836  |
|--|---|
| INCI:<br>Water (and) Glycerin<br>(and) Moringa<br>Oleifera Seed<br>Extract | INCI:<br>Moringa Oleifera<br>Seed Extract (and)<br>Maltodextrin |
| Dose of use: 1.5%  | Dose of use: 0.03%  |
|  | Preservative free   |
|  |   |



#### Total nitrogen:

- > 0.12 % (LS 9726)
- > 2.5 % (PW PSE LS 9836)











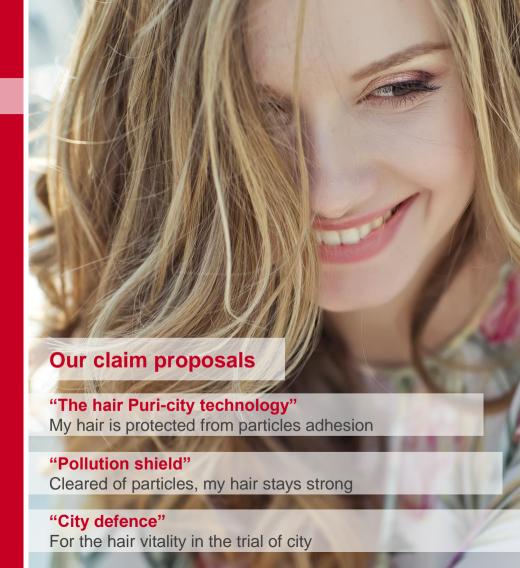
#### Puricare™

#### Concept

The Pollution that surrounds us in our daily life, not only has a negative impact on our skin but also affects the look and feel of our hair.

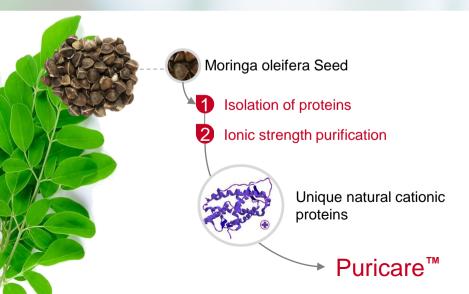
In an urban environment, hair loses its volume. It lacks strength and elasticity. It looks dry and faded. Hair is more vulnerable than skin to pollution, as it lacks a self-protection system.

PuricareTM has been developed to protect the hair against the negative effects of pollution whilst improving its beauty and mechanical properties





### For the vitality of hair in the trial of city



#### Miracle proteins

Crushed Moringa oleifera seeds have a unique ability to aggregate and precipitate particulate matter and are hence much-valued for water purification in regions with limited access to usable water.

The BASF plant extraction team has developed a manufacturing process that makes it possible to isolate and purify the cationic proteins that bear the depolluting properties of Moringa seeds.

Enriched with these proteins, Purisoft™ brings the skin effective anti-pollution properties.

#### Puricare<sup>™</sup> Main Results



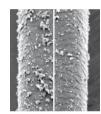




#### HAIR PROTECTION AGAINST POLLUTION AND UV

**- 35%** Hair surface occupied by particles

+ 28% Easier combing of hair stressed by city pollution



Placebo Shampoo shampoo containing Puricare™



#### IMPROVED HAIR SENSORIAL AND MECHANICAL PROPERTIES

- 64% Surface of lifted scales

+ 25% Stronger hair



### Puricare<sup>™</sup> Product Characteristics





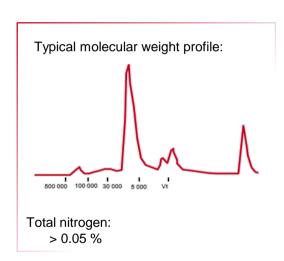
#### Puricare™

LS 9727

INCI:

Water (and) Glycerin (and) Moringa Oleifera Seed Extract

Dose of use: 2%









#### Dermagenist™

#### **Concept**

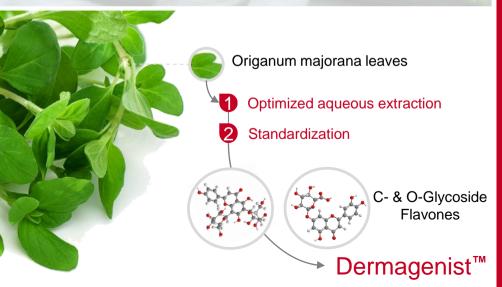
We all have a beauty potential for our skin. This beauty potential is locked deep within our skin cells' genetic makeup. The fibroblasts in particular hold the keys to producing the components of the dermis. However, our lifestyle can alter this potential and accelerate skin ageing via epigenetic phenomena.

Dermagenist™ is the first active ingredient that awakens the fibroblasts by protecting them against epigenetic modifications and by stimulating their vitality.





### The extract which impulses vitality to your skin cells



### **Tradition meets scientific expertise**

The gentle, non-denaturing aqueous extraction process used to obtain Dermagenist™ allows preserving the essential content in flavonoid glycosides of the aromatic herb Marjoram, which symbolized happiness in Ancient Greece.

Its standardized content in Vicenin-2 and Luteolin-7-O-Glucuronide makes
Dermagenist™ a unique
Origanum majorana extract.
Demonstrated with
unprecedented in vitro efficacy
on epigenetics and tensegrity,
Dermagenist™ can be used as
little as 0.4% for its visible skin
rejuvenating properties.

#### Dermagenist™ Main Results



#### **MECHANICAL FUNCTIONS RESTORED**

+ 22% Actin synthesis

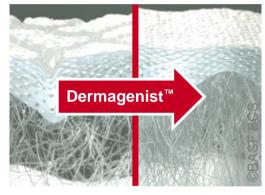
#### **METABOLIC FUNCTIONALITY RESTORED**

- 30% Environmental-methylation









Loose dermis

Dense dermis

RESTORES COLLAGEN PRODUCTION FOR AN IMPROVED COLLAGEN NETWORK

+ 58% Collagen I synthesis

In vivo:

+15% Firmness

+18% Density



### **Dermagenist**<sup>™</sup> **Product Characteristics**





#### Dermagenist™

BC 10004

INCI:

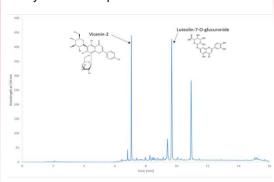
Maltodextrin (and) Origanum Majorana Leaf Extract

Dose of use: 0.4%

Preservative free







Vicenin-2 + Luteolin-7-O-Glucuronide > 0,2%









#### Speci'Men<sup>™</sup>

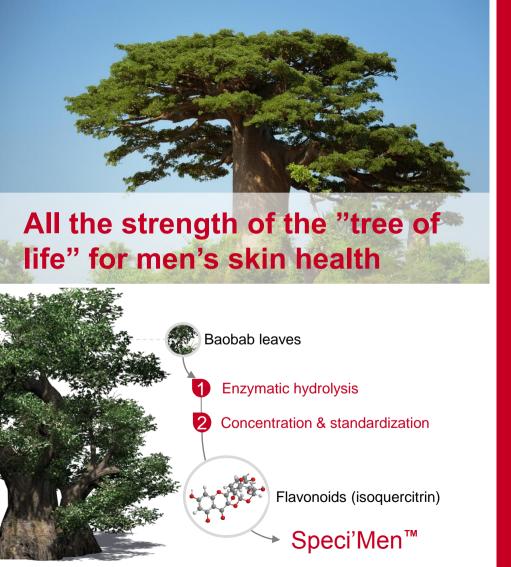
#### Concept

Most of the anti-ageing products available on the market do not address men's skin needs.

Skin's physiology differs between men and women. For instance, versican is a structural protein that is over-expressed in male skin during the ageing process.

Speci'Men™, is the first active ingredient dedicated to improving men's skin health by targeting and addressing versican accumulation.





## Baobab flavonoids dedicated to men's skin perfection

The flavonoid-rich active matter of Speci'Men<sup>™</sup> results from an aqueous extraction process combined with controlled hydrolysis of baobab (*Adansonia digitata*) leaves.

The baobab leaves used to produce Speci'Men<sup>™</sup> are carefully collected from wild populations in accordance with strict good-collection practices.

Speci'Men<sup>™</sup> also complies with the Ecocert and Cosmos standards for natural and organic cosmetics.

#### Speci'Men<sup>™</sup> Main Results





#### SPECIFIC ACTION ON MEN'S SKIN AGEING



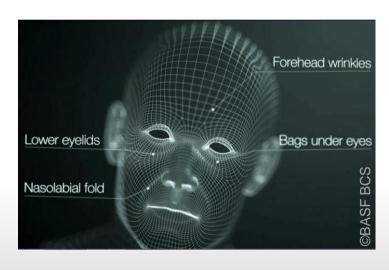


*- 32%* 

Versican expression in aged fibroblasts

- 56%

MMP-12 activity



+ 15%

Skin tonicity

- 14%

Major face wrinkle depth



# Speci'Men<sup>™</sup> Product Characteristics





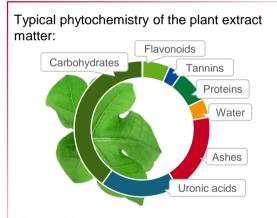
# Speci'Men<sup>™</sup>

BC 10001

INCI:

Glycerin (and) Water (and) Hydrolyzed Adansonia Digitata Extract

Dose of use: 3%



Flavonoids > 2% on dry mass









### **DN-**Age<sup>™</sup>

#### Concept

Our lifestyle regularly exposes us to sunlight. We actively seek the healthy, sun-kissed glow that imparts a youthful appearance, without realizing that behind the short term beautifying effect, is a far more harmful biological process: photo-ageing.

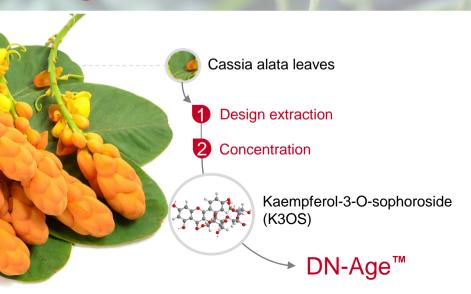
Oxidative stress is a major environmental stress factor. Free radicals are created that can alter cellular components and mechanisms. These include the DNA in the cells' power stations: the mitochondria.

With DN-Age<sup>™</sup>, BASF Beauty Creation is extended the protective power of plants against free radicals and DNA damages to human skin.





# Give your skin the plant power to fight UV effects



#### Nature identical

Kaempferol-3-O-sophoroside (K3OS) brings the candle bush Cassia alata, a particularly efficient antioxidant system to fight against UV-induced DNA damage.

BASF Beauty Creations has taken inspiration from plantdefense strategies, to supply human skin with a complementary protection.

The targeted extraction of Cassia alata leaves provides DN-Age™ titrated in flavonoids (K3OS), with demonstrated benefits on UV-induced skin damage both *in vitro* and *in vivo*.

### DN-Age<sup>™</sup> **Main Results**







#### **NUCLEAR DNA PROTECTION AGAINST UVB**

**-93 %** Thymine dimers formation **-85%** DNA fragmentation



#### MITOCHONDRIAL DNA PROTECTION AGAINST UVA

UVA-induced mutation in mitochondrial DNA UVA – induced mutation in mitochondrial DNA



#### IMPROVEMENT IN SKIN MICRORELIEF

-29%

Irregular microrelief after UV exposure











# **DN-Age**<sup>™</sup> **Product Characteristics**

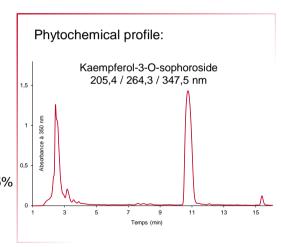




# DN-Age™

| LS 9547   | PW PSE LS 9827  |
|---|---|
| INCI:<br>Water (and) Glycerin<br>(and) Cassia Alata<br>Leaf Extract | INCI:<br>Maltodextrin (and)<br>Cassia Alata Leaf<br>Extract |
| Dose of use: 1 to 3%  | Dose of use: 0.1 to 0.25%                                   |
|   | Preservative free   |
|   |   |

ECOCERT RAW MATERIAL



Senna alata



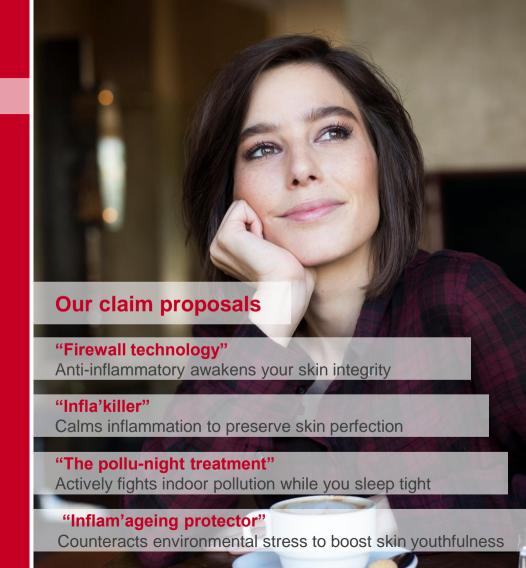
### **Eperuline**<sup>™</sup>

#### Concept

Silent and invisible: inflammaging is a vicious phenomenon. It leads to accelerated ageing due to neurogenic inflammators.

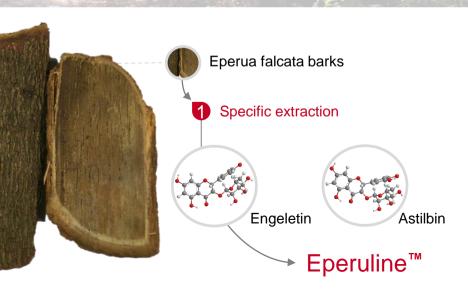
Over time, low-grade chronic inflammations, caused by everyday aggressors such as UV and pollution, lead to skin ageing.

To target inflammaging comprehensively, we developed Eperuline<sup>™</sup>: the first active ingredient to help minimize skin's micro-inflammatory state via multiple pathways.





# Inflammaging protector from the South American rainforests



# Protecting both nature and skin

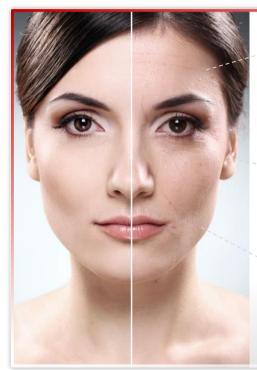
The Amazon rainforest is an incomparable source of biodiversity. *Eperua falcata* is an abundant, fast-growing tree that contains exceptionally high amounts of the dihydroflavonols engeletin and astilbin.

Combining this unique resource with BASF Beauty Creations' plant extraction expertise has led to the development of Eperuline

This preservative-free, Cosmosapproved active, offers an effective, eco-friendly solution to visible signs of inflammaging.

# **Eperuline**<sup>™</sup> **Main Results**







### INHIBITION OF THE INFLAMMATION CAUSED BY OUTDOOR POLLUTANTS

**-70%** IL-8 release induced by PM2.5 & UV



### INHIBITION OF THE INFLAMMATION CAUSED BY INDOOR POLLUTANTS

**-26%** IL-8 release induced by formaldehyde exposure



#### FIGHTS AGAINST NEUROGENIC INFLAMMATION

**-60%** Pro-inflammatory CGRP



# **Eperuline**<sup>™</sup> **Product Characteristics**





# Eperuline™

PW LS 9627

INCI:

Maltodextrin (and) Eperua Falcata Bark Extract

Dose of use: 1%

Preservative free





Phytochemical profile:

Eperua falcata



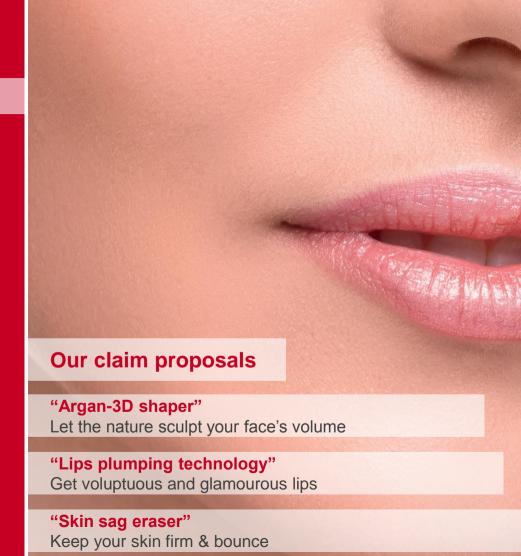
### **Argassential**<sup>™</sup>

#### **Concept**

Argan has been the Berber's beauty secret for decades.

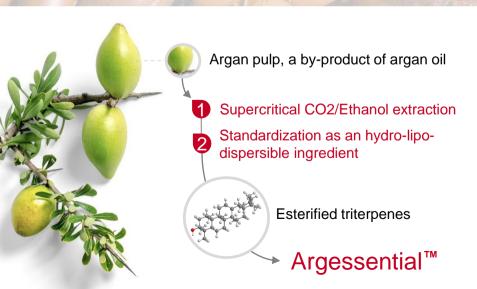
With Argassential™ extracted from argan pulp, BASF Beauty Creation wants to reveal this ingredient's exceptional properties to rejuvenate face's volume. With the effect of ageing and gravity effect, volumes crumble and the skin losses its firmness.

Argassential<sup>™</sup> is a 3D cure that sculpts lip and cheek volumes and gives back skin's firmness, to restore the face's perfect proportions and glamorous volumes.





# The extract that infuses vitality for skin cells



# Sustainable contribution to beauty

Never has a sourcing network been as effective as the BASF Beauty Creations' Argan program.

Intended to increase and diversify the revenues of local communities in Morocco, the program offers a broad range of skincare solutions.

Using a supercritical  $CO_2$  process, our BASF plant extraction team has uncovered the skin-beneficial components of argan fruit. The triterpene-rich unsaponifiable fraction contained in Argassential delivers skin firming and plumping effect.

### Argassential<sup>™</sup> Main Results





#### **DERMIS DENSIFICATION**

+ 73% Pro-collagen I synthesis

X 8,7 Collagen I synthesis

+ 13% Firmness

#### ADIPOCYTE REACTIVATION

+ 69%

Lipid storage in mature adipocytes

+8%

Lip volume



# **Argassential**<sup>™</sup> **Product Characteristics**





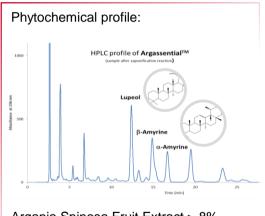
# Argassential™

BC 09959

#### INCI:

Dicaprylyl Ether (and) Sorbitol (and) Lauryl Glucoside (and) Polyglyceryl-2 Dipolyhydroxystearate (and) Water (and) Argania Spinosa Fruit Extract (and) Glycerin

Dose of use: 1.5%



Argania Spinosa Fruit Extract > 8%











#### **Credits**

#### **PUBLISHER**

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#### **PICTURES**

Agence Eiko Studio Fotolia Gettyimages

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### **Notes**





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