Smooth Lightening White rose

The origins of a radiant complexion

NAOLYS

NATURE EXPANDED


PROTECTION

Smooth Lightening White rose

The origins of a radiant complexion

A STORY

The white rose | *Rosa alba, Rosaceae*

The elegance of purity

With no colour and a simple crown of petals, this hybrid rose has symbolized purity and innocence since ancient Greek times, when it was the flower of Aphrodite, the young goddess of beauty. Today, it is an old rose grown for its resistance to the cold, its sweet, powerful scent, and its essential oil; it can still be found in growing in the wild in Asia Minor. Since the advent of Christianity, it has been associated with Mary, the key moments in life, and eternal love.

Key points

An active plant cell
Developed to deliver the highest amount of original active molecules.

A high tech natural ingredient
Created to preserve and improve the identity and the benefits of a natural product.

An essential radiance action
Protects and balances skin.

Because the loss of the complexion's radiance results from endogenous factors such as ageing, and exogenous ones, such as oxidative stress, which damages the skin, our approach is to curb their effects. To maintain a uniform complexion. To regain radiant, luminous skin.

PROTECTION

PRODUCT BENEFITS

Protection & radiance

Radiance
Revives the complexion's radiance, making it brighter and more uniform; reduces pigmentation defects.

Oxygenating, detoxifying
Enhances cellular metabolism, increases the supply of oxygen to cells in the epidermis, stimulates the elimination of toxins.

Regenerating
Increases cell regeneration in the epidermis and strengthens the skin barrier.

Antioxidant, anti-pollution
Reduces the creation of free radicals due to pollution.

To be used in skincare or make-up products like cream, fluid, serum, balm, lotion, milk, foundation, concealer, etc. All the skin care and make-up products intended to enhance the skin's brightness and protect it from external stress.

Related products: GLOBAL PROTECT BLACKBERRY | FULL DETOX EUCALYPTUS | FULL ENERGY VANILLA

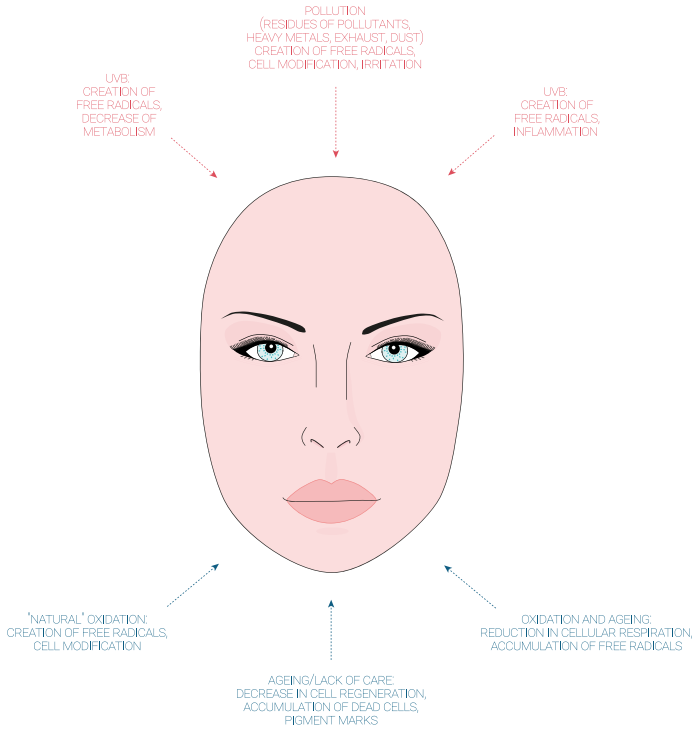
NAOLYS

HOW IT WORKS

Smooth Lightening White rose: protects and strengthens cellular activity in the skin to restore natural radiance

Throughout the year, especially in the winter, many city-dwellers complain of a dull, grey, complexion, lacking in radiance.
This can be explained by multiple factors: beyond the possible negligence of our skin, we lead high speed lives in an environment that presents many different kinds of stress, and which ultimately can threaten our skin at any time.
In the city, for example, the skin is exposed to pollutants, as well as UVB. According to recent studies, these are likely to increase cellular oxidation and weaken the skin barrier. This daily exposure has negative consequences for our skin's health; it also increases chronological ageing, which destabilizes and slows normal cell function.
But the cause can also be associated with our skin type.
In Asia, in addition to a tendency to pigment imbalance, women have more reactive skin, which dehydrates faster, and can quickly appear dull, especially when judged by the beauty standards set by the stars of the cinema and music industries.

The result is that, from East to the West, all skin tends to lose its radiance: to regain it, action needs to be taken at several levels.



FACTORS AFFECTING RADIANCE

Smooth Lightening White rose, a front-line action against factors that cause the complexion to deteriorate

Smooth Lightening White rose's action is concentrated on the epidermis, in its upper layers, where the living cells are closest to the external environment, and react to stress. It has a protective effect, and supports natural mechanisms that have deteriorated due to ageing and environmental factors.

Protects the skin from external stress

Smooth Lightening White rose protects keratinocytes in several ways.

By reducing the production of free radicals due to pollution (in particular exhaust gases) and heavy metals present in city air. This oxidation eventually leads to cellular malfunction.

By improving cellular respiration, including metabolism, thereby increasing the supply of oxygen, which also reduces the creation of free radicals and stimulates the elimination of toxins.

By reducing the synthesis of inflammatory mediators released by oxidative stress. That raises the skin's tolerance threshold, thereby reducing the factors causing irritation and redness.

Supports natural mechanisms that maintain radiance

Smooth Lightening White rose regulates keratinocyte and melanocyte activity, and thus corrects imbalances caused by ageing or which are inherent to skin type.

By decreasing excessive production of melanin, which creates marks and negatively impacts the uniformity of the complexion.

By increasing cellular renewal in a balanced way. It thus produces better cellular cohesion in the upper layers of the epidermis, resulting in better hydration of the epidermis and an improved skin barrier. This will then reduce the accumulation of dead skin cells on the surface of the epidermis and eliminate surplus melanin more quickly.

Protected and strengthened due to Smooth Lightening White rose's action, the epidermis cells regain their vigour and the skin becomes light and radiant. The complexion is more uniform.

CLINICAL TESTING RESULTS

An overall improvement in facial radiance after 56 days

The panel's verdict

90% of women reported that their skin was radiant

95% of women reported that their skin was bright

90% of women reported that their complexion was homogeneous and uniform

At a concentration of 0.5%

IN VITRO TESTING RESULTS

Anti free-radical and anti-pollution effect
Due to a reduction in free radicals demonstrated by a reduction in MDA production induced by pollutant residues **(-19%)** and heavy metals **(-22%)**.

Energizing, detoxifying effect
Due to a **21%** increase in cell respiration.

Soothing effect
Due to a decrease in the release of inflammation mediators, IL1-alpha **(-19%)**, IL-6 **(-20%)** and PGE2 **(-22%)**.

Lightening, anti-mark effect
Due to a decrease in pigmentation - reduction in melanin synthesis **(-17%)** and reduction in tyrosinase activity **(-15%)**.

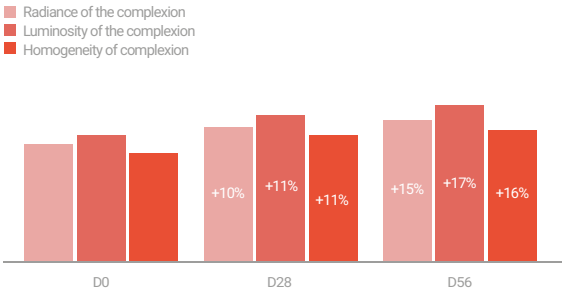
Regenerating, protective effect
Due to an increase in cellular proliferation **(17%)** and differentiation (homogenisation of the filaggrin).

At a concentration of 0.5%

Clinical study

Increase in the radiance, brightness and homogeneity of the complexion after 28 and 56 days

EFFECT ON THE COMPLEXION CUTANEOUS STATE (CLINICAL SCORING)



After 28 days then 56 days

Increase in the complexion's radiance of 10% and then 15%
Increase in the complexion's brightness of 11% and then 17%
Increase in the complexion's homogeneity of 11% and then 16%

Study conditions:

→ Tests were carried out for 28 days and 56 days on a sample of 30 women aged 25 to 65 years-old
→ Application once a day
→ Measurements made by clinical scoring carried out by a dermatologist according to a pre-established set of criteria
→ Emulsion containing 0.5% of Smooth Lightening White rose (dispersion form, 20% of cells)

Technical information on the formulation of Smooth Lightening White rose

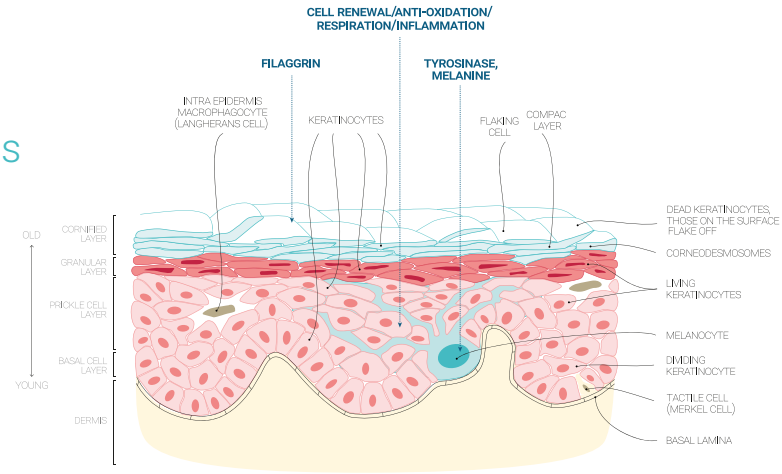
INCI name of cells	form	aspect	concentration	dispersible
rosa alba leaf cell extract	20% cells in 80% vegetal glycerin	liquid	starting at 0.5%	in any formulation (emulsion, lotion, fluid)

In vitro testing results
with concentrations of 0.5%, 1% and 2.5%

Restoration of radiance to the epidermis

By protecting the cells in the epidermis

The first action to take to restore the skin's radiance is to ensure that the cells suffer less damage from environmental factors: UVB, pollutant residues, heavy metals, and thus the oxidative stress that they cause.

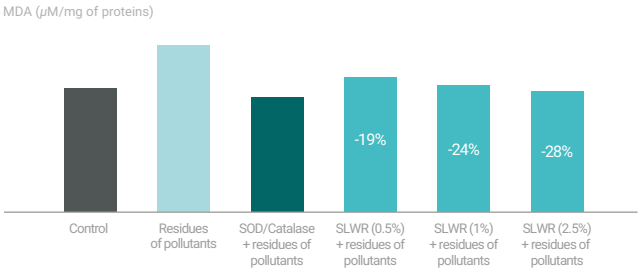


ACTIVITIES OF SMOOTH LIGHTENING WHITE ROSE IN THE EPIDERMIS

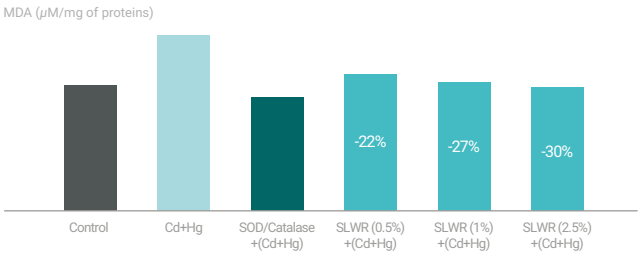
By reducing oxidation due to heavy metals and pollutant residues

Many situations can lead to an excess of free radicals (induced lipid peroxidation) such as exposure to heavy metals and pollutant residues, contamination by toxins (during respiration), and intense inflammatory reactions, etc. which affect the epidermis.
Naolys studied the release of MDA (malondialdhehyde) that occurs during lipid peroxidation induced by residues of pollutants and heavy metals.

Study of lipid peroxidation



Decrease of MDA (residues of pollutants)
→ Protection against lipid peroxidation induced by the residues of pollutants, translated by a decrease of MDA by 19%, 24% and 28% compared to protective enzymes SOD/catalase (32%).

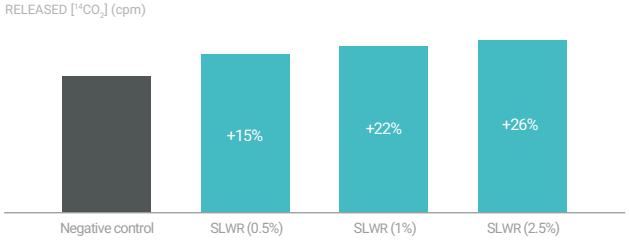


Decrease of MDA (cadmium and mercury)
→ Protection against lipid peroxidation induced by cadmium and mercury, translated by a decrease of MDA by 22%, 27% and 30% compared to enzymes protective SOD/catalase (35%).

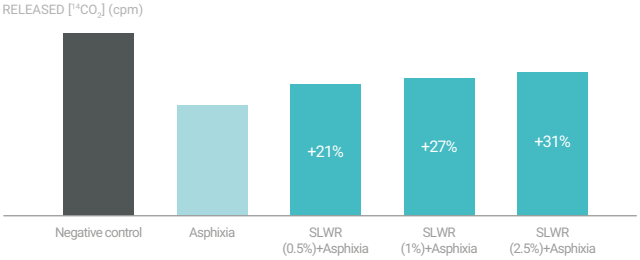
By increasing cellular respiration

We recently demonstrated that oxidation phenomena appear in the respiratory chain, and disrupt it. Naolys studied keratinocyte metabolism by looking at the metabolization of glucose by the epidermal cells in hypoxic conditions (through CO_2 release) because these cause malfunctions.

Study of cellular respiration



→ In the physiological conditions, increase of the release of $^{14}CO_2$ respectively by 15%, 22% and 26%.

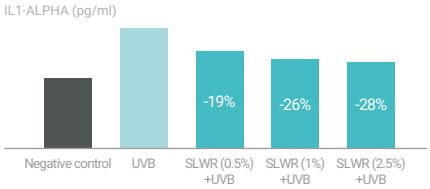


→ In the asphixia conditions, increase of the release of $^{14}CO_2$ respectively by 21%, 27% and 31%.

By the reduction of inflammation

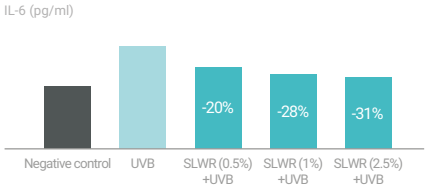
Inflammation is the tissue's response to stress, including UVB: it consists of all the defence mechanisms through which any foreign substance is recognized, destroyed or removed. Naolys studied three synthesized inflammation mediators in the hair bulb, two well-known cytokines (IL1-alpha and IL-6) and a prostaglandin (PGE2) which is involved in vasodilation, among other things.

Study of inflammation mediators



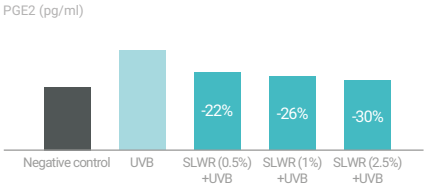
Decrease of IL1-alpha

→ After UVB induction, IL1-alpha decreases by 19%, 26% and 28% respectively.



Decrease of IL-6

→ After UVB induction, IL-6 decreases by 20%, 28% and 31% respectively.



Decrease of PGE2

→ After UVB induction, PGE2 decreases by 22%, 26% and 30% respectively.

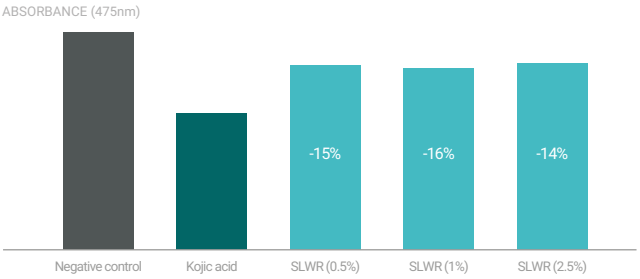
By modulating cellular activity in the epidermis

The second effect is the regulation of certain activities that stimulate or reduce radiance and which are affected by chronological ageing.

By reducing melanin production

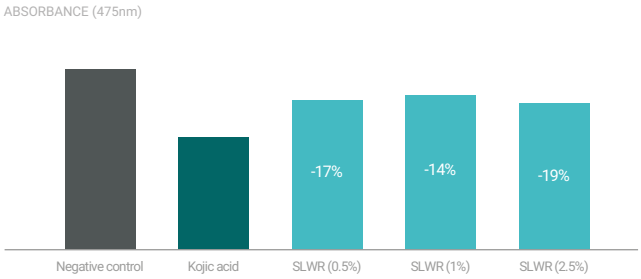
The synthesis of melanin begins with an amino acid, tyrosine, which is catalysed by the enzyme, tyrosinase. Naolys has chosen to study tyrosinase activity: this informs us of the transformation of tyrosine into melanin. It consists of the transformation of tyrosine from the direct capture from the extracellular environment or from the transformation of phenylalanine. And then the result of this activity, i.e. the synthesis of melanin itself.

Study of pigmentation



Decrease of tyrosinase activity

→ Decrease of the activity of enzyme tyrosinase respectively by 15%,16% and 14% at the level of melanocytes compared to kojic acid (-37%).



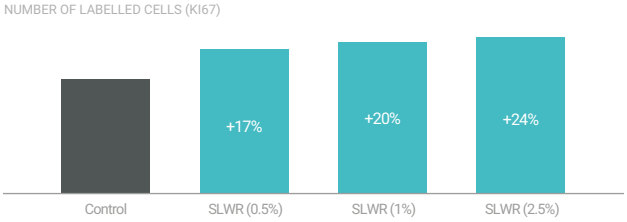
Decrease of melanine

→ Decrease of the melanine rate respectively by 17%, 14% and 19% at the level of melanocytes compared to kojic acid (-35%).

By increasing cell renewal

Cell renewal is an essential, multifunctional mechanism that ranges from the elimination of dead cells to the strengthening of the skin barrier, due to the keratin carried by the keratinocytes and the lipids they release, and the synthesis of filaggrin. In parallel, corneocytes release melanin during desquamation.

Study of cell renewal



Increase of epidermis proliferation

→ Stimulation of the proliferation of keratinocytes of the basal layer at the level of the treated epidermis translated by an increase of KI67, respectively by 17%, 20% and 24%.

Decrease of epidermis differentiation

→ Epidermal cell differentiation decreases, which is reflected by less intense but more uniform marking of the filaggrin.