

# FAIR SKIN



## CARE PRODUCTS FOR EVEN SKIN



PRODUCT	REFERENCE NUMBER	CONTENT	REFERENCE NUMBER	CONTENT
	RETAIL	RETAIL	WHOLESALE	WHOLESALE
<b>Melafadin Cleansing Powder</b>	3300	100 g	3300P	100 g
<b>Melafadin Toner</b>	3301	200 ml	3301P	500 ml
<b>Brightening Exfoliator</b>	3307	50 ml	3307P	200 ml
<b>Melafadin Day Protection</b>	3310	50 ml	3310P	200 ml
<b>Brightening Night Restore</b>	3320	50 ml	3320P	200 ml
<b>Brightening Mask</b>	-	-	3340P	200 ml
<b>2-Phase Melafadin Concentrate</b>	3370	6 x 7,5 ml	3370P	6 x 7,5 ml

Hyperpigmented areas of skin are perceived as disturbing due to their contrast to the surrounding, normally colored skin. In addition to decorative concealing measures, effective treatment to reduce or avoid this skin discoloration is therefore also desirable.

FAIR SKIN from JANSSEN COSMETICS is a special care system for treating pigmentation disorders to achieve an even skin tone. When applied regularly, pigmentation flecks are visibly and sustainably reduced, new dark discoloration of the skin is extensively combated and the complexion's color is effectively brightened.

## **PORCELAIN COMPLEXION**

Flawlessly pigmented skin is something which is desired by all women. Bright and even skin engenders a very special kind of radiance. We are usually familiar with this from youthful skin. It is evenly pigmented and bursting with freshness and energy.

## **SKIN COLOR**

A person's skin color is determined firstly by the thickness of the horny layer and the intensity of circulation, and secondly by the quantity and distribution of the skin's native pigment, melanin. On exposure to UV radiation, melanin serves as natural skin protection.

## **MELANIN FORMATION**

Melanins are yellowish-brown to brownish-black pigments. They determine the color of the skin, hair and eyes. In the skin, the melanin is formed in cells which are called melanocytes.

The melanocytes in the epidermis are found in the basal cell layer, the bottom layer of the epidermis. The melanocytes are stimulated by alpha-MSH ( $\alpha$ -MSH), a cell hormone which is secreted by the surrounding keratinocytes during exposure to UV radiation.

$\alpha$ -MSH accumulates at the surface of the melanocytes and therefore increases melanin synthesis in these cells: it activates the enzyme tyrosinase, which converts the amino acid tyrosine in several intermediate steps to produce melanin precursors. These then mature to form melanin.

A number of melanin pigments are comprised to form small packages, what are called melanosomes, and are distributed to the surrounding keratinocytes via cellular protrusions. These absorb the melanosomes, release the melanin and store it in their cell bodies to protect against UV radiation. During the natural hornification process, the pigmented skin cells move to the surface of the skin and are cast off.

The percentage of melanocytes in human skin is identical in the case of both bright- and dark-skinned persons. The variance is attributable to the difference in the melanocytes' activity. In the final analysis, the quantity of melanin which is produced determines whether we are bright- or dark-skinned.

## **CHANGES IN MELANIN FORMATION**

Different environmental stimuli disturb the melanocytes' function or destroy them.

This is visible in the form of irregular skin coloration (hyperpigmentation or depigmentation).

A range of other factors additionally intensifies hyperpigmentation. These skin changes\* are usually harmless:

- Chronic heat, e.g. due to a thermal blanket
- Chronic pressure, e.g. due to rubbing bra supports or belts
- Inflammation, visible after e.g. acne pustules have healed
- Hereditary disposition such as e.g. freckles, café au lait fleck
- Hormonal influences, e.g. due to pregnancy (chloasma) and use of oral contraceptives
- Drugs, e.g. antibiotics, anti-rheumatic agents or soporifics increase sensitivity to light
- Phototoxic reaction to e.g. bergamot oil (Berloque dermatitis)
- Exhausted skin repair system, visible in the form of liver spots and pigmentation flecks

## **INHIBITION OF MELANIN FORMATION**

Scientists have precisely studied the skin's complex bronzing activity and have undertaken specific research into active substances which inhibit melanin synthesis at its very source. JANSSEN COSMETICS has used this information to develop a cosmetic concept for blocking the skin's native melanin synthesis.

Effective skin brightening can now be given a name:

### **FAIR SKIN – BRIGHTER SKIN IN 4 STAGES**

1. Protection of the skin against UVA and UVB radiation
2. Blockage of the  $\alpha$ -MSH receptors at the surface of the melanocytes
3.
  - a) Inhibition of tyrosinase and stabilization of the inactive form
  - b) Inhibition of melanin maturation
4. Inhibition of melanin absorption into the keratinocytes

### **ACTIVE SUBSTANCES**

Specifically blocking melanin synthesis in just 4 stages is only possible thanks to the skilled combination of innovative active substances:

1. Organic UVA and UVB filters and inorganic, microfine titanium dioxide
2. Lipoamino acid
3.
  - a) Morus alba and diacetyl boldine solution
  - b) Vitamin C phosphate and vitamin C
4. SORR (highly-effective plant extract consisting of Siegesbeckia orientalis and Rabdosia rubescens)

Conclusive studies on the skin-brightening effect of the active substances are available.

### **TREATMENT DURATION**

The skin's melanin content is reduced through the regular application of FAIR SKIN cosmeceuticals. The skin therefore becomes brighter and pigmentation flecks paler.

In the case of darker skin tones and locally limited pigment enrichment (pigmentation flecks), experience has shown that a few weeks of daily application are required until skin brightening becomes clearly visible. This is understandable when it is considered that melanin which has already formed takes approximately four weeks to be transported upwards from the lowest layers and then cast off as part of the skin's normal regeneration process.

Depending on the skin's natural renewal process, the original skin tone is restored after ceasing application of the brightening FAIR SKIN care products. This is usually the case after 3 to 4 weeks. It is therefore sensible to continue the brightening treatment without interruption.

The effectiveness and skin tolerability of FAIR SKIN's skin-brightening active substances have been verified, and these active substances are unreservedly recommended for long-term application.

\*It is advisable to consult a dermatologist in the case of conspicuous skin discolorations and changes.

RET.  
100 g  
Ref.  
3300

WHS.  
100 g  
Ref.  
3300P



 JANSSEN  
COSMETICS

## FAIR SKIN

- **Creamy, soft foam**
- **Gentle, intensive cleansing for radiantly bright skin**
- **For a clear and matt complexion**
- **Leaves the skin feeling clean and fresh**
- **Pleasant fragrance**



### Home care application

Pour the powder into the palm of your hand and mix with a little water to form a creamy foam. Distribute over the face and neck in the sense of a cleansing massage. Wash off with plenty of water or a moist washing cloth. Apply regularly in the morning and evening to cleanse the skin.

***Tip:** Above all, "soap fans" who love a creamy foam for cleansing should work the powder into a foam with a little water using a brush. An even more intensive effect is achieved if Melafadin Toner is used to mix the cleansing powder.*

## Melafadin Cleansing Powder

### CLEANSING POWDER FOR BRIGHTER SKIN

The first step to achieving radiantly bright skin is mild and gentle cleansing with Melafadin Cleansing Powder.

The white and pleasant-smelling powder contains pure vitamin C for effectively brightening the skin. As soon as it is mixed with water to form a creamy foam, plant-based active surface substances remove impurities from the surface of the skin: dust, make-up, cream residues and the skin's native lipids are then simply rinsed from the skin with plenty of water.

Application in the beauty salon is also something very special and can be used as a cause for celebration: pour a little powder into a mask bowl, add a few splashes of Melafadin Toner and mix with a mask brush to form a creamy foam. Distribute the foam over the face, neck and neckline. To ensure thorough cleansing, gently massage over the skin with moistened palms. Remove residues using moist, warm compresses or mask sponges.

The skin is left feeling pleasantly clean and fresh right at the beginning of the skin-brightening treatment.



### ACTIVE SUBSTANCES

- **Pure vitamin C:** Ascorbic acid, inhibits melanin maturation
- **Condensate consisting of coconut fatty acid and amino acid:** Cleansing tenside based on replenishable raw plant materials
- **Titanium dioxide:** White pigment for optically brightening the skin
- **Talcum:** Absorbent
- **Silicone powder:** Carrier substance



## FAIR SKIN

- Refreshing tonic for brightening the skin
- Leaves the skin feeling completely clean
- For more even and finer-pored skin
- Effective start to skin brightening
- Skin-friendly pH value

RET.  
200 ml  
Ref.  
3301

WHL.S.  
500 ml  
Ref.  
3301P



## Melafadin Toner

### FACIAL TONIC FOR BRIGHTER SKIN

Melafadin Toner is indispensable for a fresh and even complexion. The facial tonic prepares the skin for effective care with FAIR SKIN. It inhibits the occurrence of dark flecks through highly-active plant extracts, promotes even skin and revives the complexion.

Toning is carried out directly after cleansing with the powder by gently rubbing the face. Application with a soaked cotton wool pad is refreshing and simple. Applying the tonic with flat hands is richer in energy and warming. To do this, simply rub the palms of the hands together intensively and distribute a few splashes of Melafadin Toner on them. Then press both hands flat onto the face, applying gentle pressure.

In the beauty salon, Melafadin Toner is an essential component for dissolving Melafadin Cleansing Powder. The tonic and cleansing powder are simply worked into a foam using a brush and are then immediately distributed over the skin. This is efficient and professional facial cleansing in just one step.



### Home care application

Pour Melafadin Toner onto a cotton wool pad and stroke gently over the skin after cleansing.

**Tip:** Melafadin Toner is outstandingly suitable for working Melafadin Cleansing Powder into a foam. Using a brush, simply mix the tonic and cleansing powder in a mask bowl until the desired foam density is achieved. The creamy, soft foam pampers the skin even during application.



### ACTIVE SUBSTANCES

- **Morus alba:** Extract from the roots of the white mulberry tree; inhibits tyrosinase and stabilizes it in its inactive form
- **Plant extract SORR:** Highly-active extract consisting of Siegesbeckia orientalis and Rabdosia rubescens; inhibits melanin absorption into the keratinocytes, has a soothing and antioxidant effect, promotes an even, radiant complexion
- **Glycerin:** Moisturizing and skin-smoothing
- **Aloe vera:** Soothing, skin-clarifying, moisture-boosting
- **Allantoin:** Regenerating and soothing



## FAIR SKIN

RET.  
50 ml  
Ref.  
3307

WHL.S.  
200 ml  
Ref.  
3307P



- **Removes dark-pigmented horny cells**
- **For radiantly bright and more even skin**
- **Promotes a fine-pored, clear skin profile**
- **Stimulates the formation of new skin cells**
- **Perfect preparation for all intensive skin-brightening treatment**

## ☰ Brightening Exfoliator

### PEELING CREAM FOR MORE EVEN SKIN

Irregular melanin distribution is comparable to a black and white drawing: dark discolorations convey a flecked image. A good eraser acts as a remedy and ensures an even surface.

Brightening Exfoliator visibly brightens dark skin and pigmentation flecks. Rounded abrasive particles eliminate the gray film on the skin and recognizably reduce irregular dark discolorations. The addition of citric and glycolic acid supports the mechanical exfoliation effect. In the same manner as a chemical peeling, surplus horny material and the melanin accumulated within it are effectively dissolved and finally removed.

Brightening Exfoliator leaves the facial skin looking clear and fresh. Flecked, "old" skin is removed and the formation of new skin cells is stimulated. The special FAIR SKIN products develop their optimal, skin-brightening effect in this regular cycle.



### Home care application

Distribute onto the skin on the face, neck and neckline twice a week after cleansing and massage, applying gentle pressure. Rinse off residues with plenty of water.

**Tip:** A cleansing brush enhances the peeling effect.

**Note:** it is vital to avoid direct exposure to the sun after each peeling treatment.



### ACTIVE SUBSTANCES

- **Polyethylene spheres:** Rounded peeling granulate for mechanically removing hornified layers of skin
- **Citric acid:** Dissolves the cement substance between the horny cells and improves the skin's surface structure in the same manner as a chemical peeling
- **Glycolic acid:** Dissolves the cement substance between the horny cells and improves the skin's surface structure in the same manner as a chemical peeling
- **Titanium dioxide:** White pigment for optically brightening the skin



## FAIR SKIN

- **Protects against bronzing UV radiation**
- **For visibly more even and brighter skin**
- **Prevents the formation of new pigmentation flecks**
- **Protects against free radicals**
- **Moisturizing and moisture retaining**
- **Outstanding foundation for make-up**

RET.  
50 ml  
Ref.  
3310

WHL.S.  
200 ml  
Ref.  
3310P



## Melafadin Day Protection

### DAY CREAM WITH SPF 20 FOR BRIGHTER SKIN

The skin's melanin content is reduced through the regular application of FAIR SKIN cosmeceuticals. The skin therefore becomes brighter and pigmentation flecks paler. At the same time, however, the skin also becomes more sensitive towards exposure to UV radiation, as its natural UV protection is missing. As a result of this, particular attention should be paid to ensuring that bleached skin is not excessively exposed to UV radiation and is always treated with care products containing a sun protection factor.

Melafadin Day Protection is a skin-brightening care cream with integrated sun protection. This makes it a typical day care product and absolutely indispensable in the long-term care of FAIR SKIN.

Melafadin Day Protection combines optimal protection against bronzing UV radiation with active substances for skin brightening and for increased moisture.



### Home care application

Apply onto the face, neck and neckline each day after cleansing in the morning and massage in gently. Outstanding foundation for make-up.

**Note:** *Even glass provides no protection against UV radiation: people whose desk is located next to a window can observe dark discoloration (melanin synthesis) of their skin even though they are in the office all day, because they are sitting in the sun.*

**Tip:** *Suitable for protecting and for brightening age spots in all areas of skin exposed to the light, e.g. the backs of the hands and the neckline. This also applies during the winter.*



### ACTIVE SUBSTANCES

- **Lipoamino acid:** (INCI: undecylenoyl phenylalanine), effective skin brightener, verifiably blocks the  $\alpha$ -MSH receptors on the surface of the melanocytes
- **Diacetyl boldine solution:** Skin-brightening complex containing the derivative of the natural active substance boldine, obtained from the bark of the Chilean boldo tree; verifiably inhibits tyrosinase
- **Plant extract SORR:** Highly-active extract consisting of Siegesbeckia orientalis and Rabbosia rubescens; inhibits melanin absorption into the keratinocytes, has a soothing and antioxidant effect, promotes an even, radiant complexion
- **Saccharide isomerate:** Moisture retention substance obtained from natural sugars; is firmly bound to the skin's keratin and leads to optimal skin moisturization thanks to its very good moisture-binding capacity
- **Chondrus crispus:** Extract from red algae, moisturizing
- **Titanium dioxide:** Inorganic, microfine UV filter, physical light protection with optical whitening effect
- **UV filters:** Organic, chemical UVA and UVB light protection filters



## FAIR SKIN

- **For visibly brighter and more beautiful skin**
- **Inhibits melanin synthesis at its source**
- **Protects against free radicals**
- **Moisturizing and moisture retaining**
- **Leaves the skin feeling soft and smooth**

RET.  
50 ml  
Ref.  
3320

WHL.S.  
200 ml  
Ref.  
3320P



## ☰ Brightening Night Restore

### SKIN-BRIGHTENING NIGHT CARE

FAIR SKIN requires twice the attention: effective skin brightening and perfect long-term care.

Brightening Night Restore can provide both. The velvety soft care cream ensures a flawless, even complexion and provides perfect care. Over night, effective skin brighteners inhibit melanin synthesis at its very source and supply the skin with lots of moisture. At the same time, the skin's native repair of e.g. UV-related cell damage is stimulated. In contrast to conventional skin brighteners, the skin is restructured and left looking even, smooth and beautiful again.

Brightening Night Restore leaves the skin feeling like never before. It feels velvety and soft even whilst the cream is being distributed. Exactly the right prerequisite for long-term care and indispensable for a flawless, even complexion with vital radiance.



### Home care application

Apply onto the face, neck and neckline each day after cleansing and toning in the evening and massage in gently.

**Note:** *Brightening Night Restore only contains 10% oil and is therefore only partially suitable for a facial massage. Addition of the De-Stress ampoule (oil) makes the brightening cream perfectly suitable for massaging and simultaneously fortifies the natural hydrolipidic barrier to protect against TEWL (trans-epidermal water loss).*



### ACTIVE SUBSTANCES

- **Lipoamino acid:** (INCI: undecylenoyl phenylalanine), effective skin brightener, verifiably blocks the  $\alpha$ -MSH receptors on the surface of the melanocytes
- **Diacetyl boldine solution:** Skin-brightening complex containing the derivative of the natural active substance boldine, obtained from the bark of the Chilean boldo tree; verifiably inhibits tyrosinase
- **Plant extract SORR:** Highly-active extract consisting of Siegesbeckia orientalis and Radosia rubescens; inhibits melanin absorption into the keratinocytes, has a soothing and antioxidant effect, promotes an even, radiant complexion
- **Chondrus crispus:** Extract from red algae, moisturizing
- **Fine polyamide powder:** Porous, round spheres, microfine; leaves the skin feeling powdery and light and looking velvety and matt



## FAIR SKIN

- Leaves the skin looking more even and bright
- Inhibits melanin synthesis
- With immediate optical effect thanks to white pigments
- Moisture-balancing



### Home care application

Distribute Brightening Mask onto cleansed skin and allow to work in for 10-20 minutes. Remove the mask residues with warm compresses.

*Tip: Also ideal for treating age spots on the backs of the hands.*

WHL.S.  
200 ml  
Ref.  
3340P



## Brightening Mask

### CREAM PACK FOR RADIANTLY BRIGHT SKIN

Healthy skin is even, pure and beautiful. In contrast, stressed and tired skin is unusually pale. Dark discolorations are then particularly visible and disturbing.

Brightening Mask offers an effective remedy and leaves the skin looking beautiful and bright. The combination of highly-active substances leads to rapid care success. The skin brighteners and antioxidants take effect during a short mask break. The creamy facial mask additionally improves cell cohesion and smoothes the surface of the skin. The skin's moisture balance is noticeably optimized and maintained for a number of hours.

It rapidly regains its healthy radiance: the complexion is even and smooth whilst the skin is left feeling silky-soft.



### ACTIVE SUBSTANCES

- **Lipoamino acid:** (INCI: undecylenoyl phenylalanine), effective skin brightener, verifiably blocks the  $\alpha$ -MSH receptors on the surface of the melanocytes
- **Plant extract SORR:** Highly-active extract consisting of Siegesbeckia orientalis and Rabdosia rubescens; inhibits melanin absorption into the keratinocytes, has a soothing and antioxidant effect, promotes an even, radiant complexion
- **Isostearyl isostearate:** Shortened to ISIS, emollient based on replenishable raw plant materials; improves the cohesion of the lipids in the Stratum corneum and reduces the skin's trans-epidermal water loss
- **Liquorice root extract:** Potassium glycyrrhizin, main constituent of the liquorice root; alleviates irritation and brightens the skin
- **$\alpha$ -bisabolol:** Soothing
- **Titanium dioxide:** White pigment for optically brightening the skin

# FAIR SKIN

- Intensive skin brighteners freshly prepared with each ampoule
- Effective brightening of pigmentation disorders
- Inhibition of melanin synthesis
- Practical dosage form



## Home care application

2-Phase Melafadin Concentrate is a 6-week course of treatment. The content of one ampoule (7.5 ml) is sufficient for one week and consists of a powder and a liquid component. Both components are mixed prior to initial application. To do this, simply press the red button on the sealing cap forcefully. The vitamin C powder drops into the activator fluid. Now remove the pushbutton, install the pipette with sealing cap onto the ampoule and shake well. Apply approx. 1 ml of the active substance solution onto cleansed skin each day in the evening. Then apply Brightening Night Restore.

**Note:** Adequate UV protection must be ensured after each brightening treatment. Melafadin Day Protection is optimally used during the day.



RET.  
6 x 7,5 ml  
Ref.  
3370

WHL.S.  
6 x 7,5 ml  
Ref.  
3370P

## 2-Phase Melafadin Concentrate

### HIGHLY-EFFECTIVE, SKIN-BRIGHTENING 2-PHASE ACTIVE SUBSTANCE CONCENTRATE FOR APPLICATION AS A COURSE OF TREATMENT OVER 6 WEEKS

Highly-concentrated vitamin C phosphate inhibits melanin maturation and additionally protects the skin against oxidative stress. It promotes the skin's native repair mechanisms and activates collagen synthesis. All of this is now available in one single sealing cap, which quite literally releases its contents at the push of a button. The vitamin C powder (phase 1) is absorbed and dissolved by the active substance-rich activator fluid (phase 2). The two phases combine to form the extremely highly-dosed skin brightener with unbeatable effect.

To achieve a radiantly beautiful, flawless complexion, application is planned as a course of treatment. 6 ampoules á 7.5 ml are intended for one six-week course of treatment (one ampoule per week). The skin becomes noticeably brighter according to the regeneration cycle. The visibility of existing pigmentation flecks is minimized and the skin's melanin production is simultaneously normalized to prevent the occurrence of new pigmentation flecks.

The practical pipette cap offers an optimal dosing aid. The liquid active substance extract can be removed drop-by-drop for precise skin brightening or can also be used generously to treat the entire face.

When used regularly, the effect becomes apparent after the first six-week course of treatment. Excessive melanin synthesis is inhibited. The effect soon becomes visible on the surface of the skin corresponding to the skin's regeneration cycle. Existing flecks have already become paler and, after a further six-week course of treatment, the complexion is left looking significantly more even and brighter.



## ACTIVE SUBSTANCES

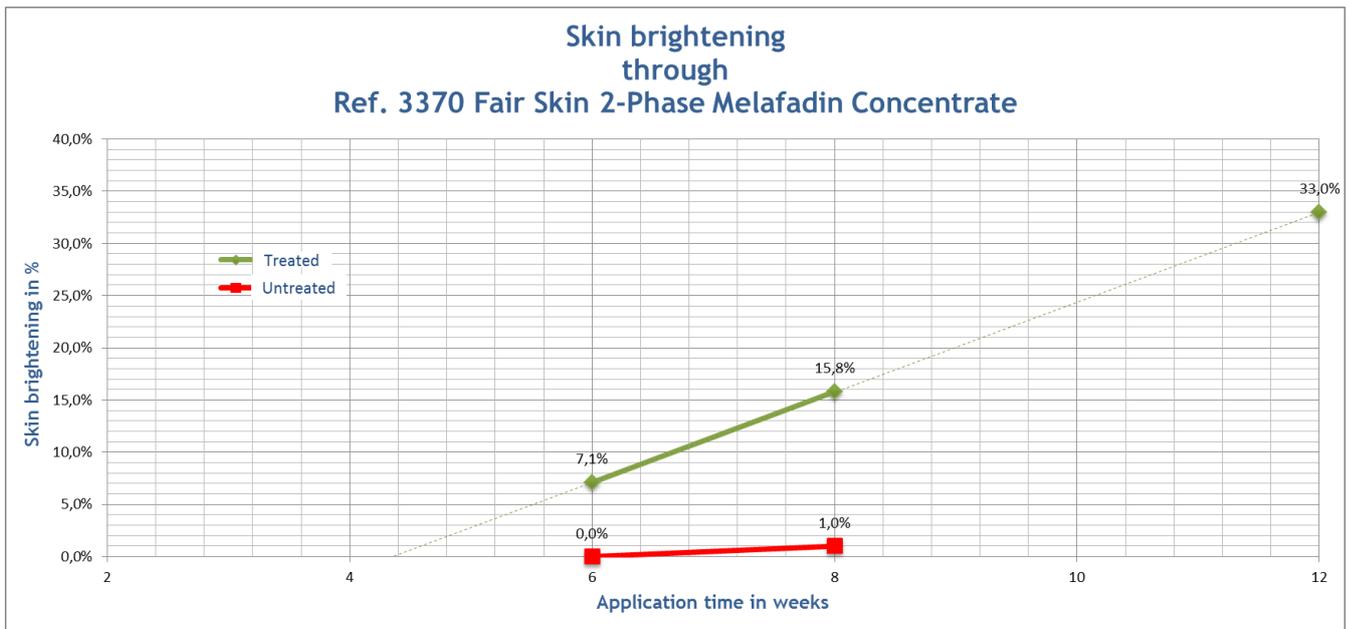
### Powder phase:

- **Vitamin C phosphate:** Stabilized ascorbic acid; stable in water; is transformed into free vitamin C on the skin by the skin's native enzymes (esterases); inhibits melanin maturation

### Liquid phase:

- **Lipoamino acid:** (INCI: undecylenoyl phenylalanine), effective skin brightener, verifiably blocks the  $\alpha$ -MSH receptors on the surface of the melanocytes
- **Plant extract SORR:** Highly-active extract consisting of Siegesbeckia orientalis and Rabdosia rubescens; inhibits melanin absorption into the keratinocytes, has a soothing and antioxidant effect, promotes an even, radiant complexion
- **Morus alba:** Extract from the roots of the white mulberry tree; inhibits tyrosinase and stabilizes it in its inactive form

**SKIN BRIGHTENING ON DAILY APPLICATION OF THE TEST PRODUCT IN COMPARISON WITH UNTREATED SKIN**



**Number of test persons:** 19.

**Method:** Assessment of the color tone of the skin by a dermatologist on the basis of a specified color scale.

**Description of the results:** The changes in color tone determined after 6 and 8 weeks are specified as mean values (n=19). The anticipated skin brightening value after 12 weeks is determined from these values by means of linear extrapolation.

## BRIGHTER SKIN IN 4 STAGES

Specific blockage of melanin synthesis with the FAIR SKIN active substances.

### STAGE 1

We use a combination of **organic filters** and **inorganic titanium dioxide** (microfine). These prevent UV radiation from penetrating into the epidermis.

Effect: **Protection of the skin against UVA and UVB radiation**

The keratinocytes in the epidermis form fewer cell hormones (e.g.  $\alpha$ -MSH).

### STAGE 2

The cell hormones formed in the keratinocytes leave the keratinocytes and bind to receptors on the surface of the melanocytes. The tyrosinase gene in the cell nucleus is activated by further messenger substances.

The active substance **lipoamino acid** (INCI: undecylenoyl phenylalanine) prevents the keratinocyte cell hormone  $\alpha$ -MSH from binding to the surface of the melanocytes.

Effect: **Blockage of the  $\alpha$ -MSH receptors**

### STAGE 3

The tyrosinase gene produces the enzyme tyrosinase (in its inactive, dormant form).

The protein kinase A enzyme transforms inactive tyrosinase into its active form. The active substance **diacetyl boldine solution** blocks the protein kinase A enzyme and therefore the transformation of inactive tyrosinase into active tyrosinase.

Effect: **Inhibition of tyrosinase** (the content of active tyrosinase is reduced)

The activated tyrosinase forms melanin precursors from the amino acid tyrosine (which is transported via the blood).

The tyrosinase enzyme's activity can be disrupted thanks to the **extract from the roots of the mulberry tree**.

Effect: **Inhibition of tyrosinase** (the quantity of melanin precursors is reduced)

Oxidation transforms the still colorless melanin precursors into dark-brown melanin. Active substances with reducing potential, i.e. antioxidants such as vitamins C and E, impede oxidation of the melanin precursors.

We use **vitamin C** and **vitamin C phosphate** (a more stable form of vitamin C).

Effect: **Inhibition of melanin maturation** (less dark-brown melanin is formed)

### STAGE 4

The melanin produced in the melanocytes is transported to the surrounding keratinocytes via cellular protrusions. There, it is absorbed into the interior of the cell and above all protects the cell nucleus from damage caused by UV radiation.

The melanin stored in the keratinocytes gives the skin a darker color tone.

The **plant extract SORR** (Siegesbeckia orientalis and Rabdosia rubescens) enables melanin absorption into the keratinocytes to be prevented.

Effect: **Inhibition of melanin absorption** (less melanin occurs in the keratinocytes; the skin's color tone becomes brighter)

## RESULTS OF SCIENTIFIC STUDIES

### 1. Organic UVA and UVB filters and inorganic, microfine titanium dioxide

Light protection filter measurements confirm the disclosed UVA and UVB protection.

### 2. Lipoamino acid

In vivo study on 30 Asiatic volunteers, application twice daily with 2% lipoamino acid in test formulation; 2-month application duration:

- **More even and radiant skin:** **73% of volunteers**
- **Visible brightening the skin:** **52% of volunteers**
- **Visible brightening of age spots:** **86% of volunteers**

**The effect can be enhanced in combination with AHAs**

**Very good skin tolerability**

#### 3.1. Diacetyl boldine solution

Diacetyl boldine solution has a verifiable brightening effect on the skin.

In vitro tests with melanocyte cell cultures with 4% diacetyl boldine solution:

- **Decrease in tyrosinase activity:** **35%**
- **Decrease in melanin content:** **51%**

Ex vivo studies on a 3D skin model reveal a **visible and significant decrease in epidermis pigmentation**.

In vivo colorimetric tests on 20 Asiatic volunteers prove that skin treated with diacetyl boldine solution reveals a lower melanin index and a higher ITA value (clarity).

In a self-assessment, over half of the volunteers stated that their skin was locally less pigmented and additionally appeared more radiant and even.

#### 3.2 Vitamin C phosphate / vitamin C

In vitro test with human melanocytes, 4 days of treatment with 0.14% vitamin C phosphate:

- **Reduction of melanin maturation:** **57%**

In vivo study on 39 female Asiatic volunteers, three-month double-blind study, placebo-controlled, test cream with 3% vitamin C phosphate:

- **Reduction of age spots and general skin brightening:** **25%**

## 4. SORR

**(Highly-active plant extract consisting of Siegesbeckia orientalis and Rabdosia rubescens)**

Verification by means of in vitro studies with 3% SORR extract:

### A. Effect on melanin (brown flecks)

- A.1. Decrease in melanin content:** **45 %**
- A.2. Reduction of melanosome absorption into the keratinocytes:** **34 %**

### B. Effect on hemoglobin (red flecks)

- B.1. Decrease in vascular endothelial growth factor (VEGF):** **44 %**
- B.2. Reduction in vascular sensitivity:** **60 %**

# SKIN APPLETS



## PROFESSIONAL SKIN CARE FOR BRIGHTER SKIN

TREATMENT SEQUENCE	PRODUCTS
<b>Cleansing</b>	<ul style="list-style-type: none"><li>• Melafadin Cleansing Powder</li></ul>
<b>Refreshing</b>	<ul style="list-style-type: none"><li>• Melafadin Toner</li></ul>
<b>Eye care</b>	<ul style="list-style-type: none"><li>• Rich Eye Contour Cream</li></ul>
<b>Deep cleansing/peeling</b> <i>Alternatively</i>	<ul style="list-style-type: none"><li>• Brightening Exfoliator</li><li>• Bio-Fruit Gel Exfoliator <i>or</i></li><li>• Enzyme Peeling Mask <i>with</i> Ocean Mineral Activator</li></ul>
<b>Extra cleansing</b> ( <i>if required</i> )	<ul style="list-style-type: none"><li>• Normalizing Skin Complex</li></ul>
<b>Ampoule concentrate</b>	<ul style="list-style-type: none"><li>• 2-Phase Melafadin Concentrate <i>or</i></li><li>• Melafadin Fluid</li></ul>
<b>Massage</b> <i>Additionally to improve "slipperiness"</i>	<ul style="list-style-type: none"><li>• Brightening Night Restore</li><li>• De-Stress Ampoule</li></ul>
<b>Mask</b> <i>Alternatively</i>	<ul style="list-style-type: none"><li>• Brightening Mask</li><li>• Peel Off Mask Botanica White <i>or</i></li><li>• Dermafleece Mask Collagen Fair Skin</li></ul>
<b>Conclusion - eye area</b>	<ul style="list-style-type: none"><li>• Rich Eye Contour Cream <i>or</i></li><li>• Eye Zone Gel</li></ul>
<b>Day protection with SPF</b>	<ul style="list-style-type: none"><li>• Melafadin Day Protection</li></ul>