



SUNCARE



ONLY PRIVATE LABEL

- FORMULA ADAPTED TO CUSTOMER REQUIREMENTS AND TARGET GROUP
- EMULSION OR SPRAYABLE GALENIC PRESENTATION
- PACKAGING ADVICE
- COLIPA RECOMMENDATION 30% UVA PROTECTION & AUSTRALIAN STANDARD
- OTHER PROPERTIES: MELANINE ACTIVATOR, SELF-TANNING, COLD EFFECT, REAFFIRMING, WATER PROOF ...



GENERAL INFO - SUNLIGHT

- **Sunlight emits visible and invisible wavelengths between 280nm, and 3000 nm. Said radiation is absorbed in part by clouds, the ozone layer, atmospheric contamination and other elements.**
- The main cause of immunosuppression, premature skin ageing, the formation of free radicals, photo-toxic and photo-allergic reactions and lesions caused by UVA radiation are due to the penetration of these into the connective tissue of the skin.
- UVB rays penetrate the deepest cellular layers of the epidermis and are the principle cause of sunburn, DNA-damage and the appearance of skin cancer. Warming IR (infrared) rays and visible light do not damage the skin.
- Harmful short-wave UVC radiation should not worry us, since all scientist agree that it never reaches the surface of the earth, because direct and indirect solar radiation wavelengths which constantly bombard the earth, are scattered through the atmosphere, these being the most scattered.

Therefore UVA and UVB radiations are the cause of skin lesion and these also stimulate the photo-protective mechanisms of the organism, in the different skin layers.

Short and controlled exposure to sunlight is sufficient to produce positive effects in the organism.

- **UV radiation on the skin: effects.**
- The general principle is that radiation penetrates more and more deeply the longer the wavelength is. Example: UVB radiation at 300nm. penetrates the basal layer of the skin in a high percentage.
- UVB radiation is very erythemagenic; the consequences are that sunburn (solar erythema) and later DNA damage trigger off epidermal alterations, acute and chronic lesions, damaging the Langerhans` cells which react to UV radiation by leaving the epidermis. Immunological studies carried out on people submitted to amplified UVB irradiation, have demonstrated these effects without any doubt.



SUNLIGHT



- Geographical factors such as latitude and altitude (costal and alpine regions, etc.) as well as the time of day and levels of atmospheric pollution, are the cause of how much UVB radiation reaches the skin. Specifically the reduction of the ozone layer has represented an increase of UVB radiation which reaches the earth and skin in solar exposure.
- Irreversible lesions in the long term as well as the premature ageing of the skin and the formation of free radicals are produced by the deep penetration of the connective tissue by the UVA rays, moreover:
- **Photo-allergic and photo-toxic reactions**
These may appear, among other causes, as a reaction to solar exposure of certain ingredients contained in cosmetics, perfumes and by the use of certain medicines.
- **Formation of oxidants and solar allergies**
UV radiation, especially UVA, triggers off cutaneous lesions through the formation of free radicals which damage the cells of the skin. The accumulation through the years of solar exposure may produce chronic lesions. Also they are considered responsible for polymorphic light eruption (PLE) which appears especially in young women.
- **SUMMARY: UVB and UVA radiation are responsible for cutaneous damage:**
UVB radiation due to its deep penetration of the epidermis causes solar erythema, DNA damage and the possibility of skin cancer. UVA radiation due to its penetration of the connective tissue can cause chronic lesions. Moreover it can cause the formation of free radicals and photo-allergic and photo-toxic reactions.

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NATURAL SKIN PROTECTION

- Solar radiation produces a series of positive effects in the organism: vitality is increased, a feeling of well-being is produced, it favours circulatory and metabolic processes and aids the formation of vitamin D. A little sunlight is sufficient to increase the feeling of well-being.
- The skin has the capacity to protect itself from the negative effects of UV radiation; these mechanisms are listed as following:
 - increase of pigmentation
 - thickening of the stratum corneum of the skin
 - DNA repair mechanisms
 - formation of UV-filtering substances such as urocanic acid
 - activation of the antioxidants present in the skin
- 2 to 4 weeks are needed for the photo protective mechanisms of the skin, consistent pigment formation and thickening of the stratum corneum, which are able to develop in the presence of low UV dosage levels.
- **Melanin synthesis**
Tanning is produced from the synthesis of melanin in the melanocytes, which are found in the epidermis and require UV radiation to activate them.
- **The thickening of the skin's Stratum conium**
Exposure to the sun stimulates physiological defences, which lead to a considerable thickening of the horny layer of the skin (hyperkeratosis). The melanin plus hyperkeratosis confers the skin with an effective protection against UV radiation.



NATURAL SKIN PROTECTION

- **Repair mechanisms of DNA**

the skin has DNA repair mechanisms to repair the DNA which, to some extent, can reduce the magnitude of cell-damage caused by UV radiation.

- Nevertheless, if the skin is exposed to the sun for too much time and is not properly protected, the skin's photo protection is insufficient and the DNA repair mechanisms will not be in this way, chronic lesions produced by solar radiation, together with solar elastosis, precancerous lesions and squamous cell carcinomas. These chronic manifestations are irreversible, whereas sun erythema is not.

- **Radical scavengers (antioxidants)**

the cells of the skin have enzymes which give in the skin protection against the cell-damaging effects of free radicals. The food we eat supplies our organism with radical scavengers, the most effective being tocopherol, ascorbic acid and carotene. Melanin also helps to eliminate the radicals.

- Epidermal melanin is a natural protection from UV radiation, reducing, and at the same time stimulating the formation of more melanin.
- The immediate pigmentation is produced principally by UVA radiation: The weakly coloured melanin precursors darken due to oxidation. Nevertheless, this tanning of the skin is short-lived, giving little protection from the sun.
- Due to the transference of melanosomes the released melanin protects the DNA by surrounding the cell nuclei and the pigment subsequently migrates to the surface of the skin.
- The enzyme tyrosinase is needed for melanin formation, on activating its function which slows down the regeneration of the cells, with the consequent thickening of the horny layer of the skin.
- **SUMMARY:** The natural photo protection of the skin in the face of UV radiation includes the following mechanisms:
 - Increase of the pigmentation and the thickening of the horny layer of the skin.
 - DNA repair mechanisms
 - the skin creates its own UV-filtering substances
 - the body's own antioxidants are activated, and can be stimulated by a balanced diet.



UV FILTERS

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- When the skin is exposed to the sun, the natural cutaneous defences must be reinforced, for this reason it is necessary to use a variety of ingredients, which act as solar radiation blocks, acting as a shield between the sun and the skin.
- **There are two types of UV filters, the physical and the chemical:**
 - All the UV physical filters are inorganic mineral pigments. The inorganic filters act by reflecting and/or scattering the UV radiation, impeding their penetration of the skin. If these filters are adequately formulated they do not whiten the skin.
 - All the chemical filters are organic compositions, which absorbed the UV radiation. These act by emitting as thermal radiation the absorbed energy. They are classified as UVB, UVA and broadband filters.
- The most effective UV protection is obtained by means of a combination of Physical and Chemical - UVA and UVB filters (broadband preparations) with the addition of antioxidants, such as Vitamin E, which reduces the formation of free radicals.
- **UVB radiation - Sun Protection Factor (SPF) determination:**

The SPF has been determined in accordance with the COLIPA method since 1997. The results have shown the high accuracy of this method. The standardization permits the laboratories, to the benefit of users, the use of a standard method to evaluate the efficiency of the product.

UV FILTERS

- **UVA radiation - Sun Protection Factor (SPF) determination:** Given that the effects of UVA radiation on the skin are long term, in Australia, the authorities a photometric process to calculate the reduction of the UVA radiation on the skin, which generates a reliable and reproducible measurement. This standard (Australian Standard AS 2604:93) requires that the sunscreen has a minimum UVA radiation absorption capacity of 90%.
- **Photo Stability:** Due to the tendency to use sunscreens with a high SPF, substances which are stable to UV must be included. UV filters may become unstable, among other causes, through the action of light and the influence of cutaneous enzymes. For example, benzophenone and the metoxicinamate supply a high level of photo stability, whereas other filter agents degrade more quickly.
- **SUMMARY:** Two basic types of UV filters are known, physical and chemical. To protect the skin from UV radiation, it is recommended to use photo stable UV filters in sunscreen products, as much as possible. The SPF against UVB is determined in accordance with the COLIPA method and the SPF against UVA, in accordance with the Australian Standard.





BASIC SKIN PROTECTION RECCOMENDATIONS

- With the aid of these charts it is simple to select the correct individual protection factor, taking into account the varying radiation intensities and different skin types.
- **Correct use of sunscreens. How they are used**
It is frequently the case that the sunscreen is applied and rubbed into the skin only after arriving at the beach. Nevertheless, sun screens require at least 30 minutes to develop their protective capacity, given that the chemical filters must first bond to the skin.
The consequence to the user's ignorance to this is the appearance of a sun erythema in spite of the application of the sun screen.
For people with skin types I - III, it is of maximum importance to apply a sun screen at least 30 to 45 minutes before direct exposure to the sun. This recommendation is valid for the beach, mountain or snow.
- **What to use for children**
Sun screen preparations for children must offer a protection factor for UVB of 15, at least, as well as sufficient protection against UVA. The skin's memory: Recent scientific advances have confirmed the clear correlation which exists between severe sunburn in childhood and melanoma in later life.
- **Beach umbrellas and shade**
The belief that beach umbrellas and shade can guarantee a complete protection against UV radiation can result in painful sunburn. The reason being that the scattering effect is very high with shorter wavelengths, in such a way that the skin may receive a very excessive dose of UV radiation without direct exposure to the sun. To protect the skin against UV radiation it is necessary to take into account the "the shadow rule" if your shadow is shorter than your body, there is danger of UV skin damage.
- **Water as protection**
The generalized belief that staying in the water protects the skin from UV radiation is an error; even at a depth of one metre, the intensity of the UVB radiation is nearly 50% of the total, even in these conditions may result in a sun erythema. Moreover, the cooling effect of the water often masks any pain.
- **SUMMARY:** To achieve adequate protection against the sun the skin pigmentation type, location, duration, and intensity of UV exposure should be taken into account
Those people with skin which is extremely sensitive to the sun must adopt unconditional precautions which are adequate against UVA and UVB radiation. UVB.
The sun protection factor does not provide more protection because it is higher, but for a longer time period, if it is correctly applied and suitable for the skin type. In case of problems, consult a dermatologist.



PRE-SUN



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Following the tendency of obtaining a uniform tan in the shortest possible time, our laboratory is proud to be able to present a wide range of products based on the concept PRESUN.

Ultra-fast tanning products melanin activators, without or with UVA and UVB low sunscreen factors, especially indicated for:- Use with UVA lamps or in solariums, all year round.- For swarthy or tanned skins, for the first few minutes of exposure to the sun. The PRESUN products are presented in different formats:

Individual sachettes , [Spray](#), [Emulsions](#), [Sun Uva](#)

Also they can be presented in cream and gel format with different qualities and viscosities. In all the products the skin irritation test has not been carried out on animals. All the products are OIL FREE they do not contain mineral oils in their composition, with quick absorption and matt effect (shine free).

The added value ingredients, tanning accelerators are: Cocos Nucifera (Coconut Oil), Gardenia Tahitensis (Tiare Flower), Melanin, Phospholipids, Helianthus Annuus (Sunflower Seed Oil), Daucus Carota Sativa (Carrot Oil), Beta-Carotene (Carrot Extract), Glucose Tyrosinate, Lecithin, Acetyl Tyrosine, Riboflavin, Dextran, Acetyl Hexapeptide-1.

Other ingredients are: Aloe Barbadensis (Aloe Vera Gel), Tocopheryl Acetate (vitamin E natural antioxidant), Squalane.

IMPORTANT WARNING: For all the PRESUN products which do not contain a sunscreen factor, after 15/30 minutes (depending on the type of skin), it is necessary to apply a product with a sunscreen factor for long periods of solar exposure.

AFTER SUN

- All the products for application after exposure to the sun or UVA, serve one purpose to act as an emollient, decongestive, calmative, freshener and moisturizer, especially recommended for pale skin and the initial stages of exposure to the sun or UVA lamps.
- They are available in the form of individual sachets, emulsions, creams, gels, sprays, etc.
- Target group: mass market, with an excellent relation quality/price.
OIL FREE emulsion especially for use after exposure to the sun or UVA lamps, with an emollient, decongestive, calmative, freshener, and moisturizer action, especially recommended for pale skin and the initial stages of exposure to the sun or UVA lamps.
- Instruction for use: Apply with a gentle massage until completely absorbed, in areas which are more sunburnt leave a layer to serve as a protective shield against the rays of the sun. On application an agreeable sensation of coolness and well-being will be immediately experienced.
- Does not contain preservatives, nor perfumes.



SPF



We produce SPF products until SPF50+ following COLIPA & Australian standard regulations (INCI or FDA)

All SPF contains chemical & physical filters: UVB (280-320 nm), UVA (320-400) and mineral pigments (Titanium dioxide, Zinc oxide)

The SPF depends on skin type:

| SKIN TYPE | FREQUENCY | CHARACTERISTICS | SUN REACTION |
|-----------------|------------|---|---|
| TYPE I | 2% | light skin, freckled, red-haired, light nipples (Celtic type) | tendency to be sunburned, pigmentation absence |
| TYPE II | 12% | light skin, blond-haired, sometimes freckled, light nipples (Germanic type) | frequently sunburned, low pigmentation |
| TYPE III | 78% | moderately light skin, black or brown haired, pigmented nipples (mixed type) | not frequently sunburned, good pigmentation |
| TYPE IV | 8% | dark skin, dark haired, dark nipples (Mediterranean type) | practically not sunburned, excellent & deep pigmentation |



SELF-TANNING



- It is an emulsion for tanning without the Sun which produces a reaction with the amino acid areas free from the proteins of the skin (Naielard reaction), giving a coloured complexion that leaves the skin with a natural tanning effect.

Its effects can be seen one or two hours after its application, this effect will be intensified with successive applications. It lasts from three to seven days, depending on the type of skin.

- It does not contain colouring (it does not dye the skin) and the tanning effect is not lost by washing. Ideal to show off a natural tanning all year round for the face and neckline, especially recommended in the spring to show off wonderful legs when you stop using stockings or tights.





INFO NEEDED TO QUOTE A PRIVATE LABEL

- CAPACITY IN ML AND QUANTITY PER ORDER
- PACKAGING CHARACTERISTICS REQUIRED: TYPE (TUBE, BOTTLE, SPRAY...), ARTWORK, PRINTING COLOURS, TEXTS, BOX CHARACTERISTICS, SHIPPING MARKS.
- FORMULATION (SPF) OR EFFECTS SPECIFICATIONS
- TARGET GROUP AND BUDGET. COST PRICE PER UNIT.
- ADDITIONAL TESTS: CHALLENGE TEST OR OTHERS
- PAYMENT TERMS & CONTRACT



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