

pr

UV

Skin Protection Lotion

when exposed to **UV-radiation**

water-resistant, LPF 20

PRODUCT DESCRIPTION

UV skin protection lotion (type W/O emulsion with suspended titanium dioxide and zinc oxide) for protection against UVA, UVB and UVC radiation, transparent, water-resistant, easily spreadable, slightly perfumed, with vitamin E-acetate, panthenol and beeswax.

Does not contain preservatives, coloring or silicones.

FIELD OF APPLICATION

Workplaces with intensive radiation by sunlight or technical UV radiation sources, e.g. electric arc with electric welding, mercury pressure lamp with the hardening of plastics, drying of paints etc. Also can be used for water sports and other leisure-time activities.

FUNCTION

prUV protects the skin in UVA, UVB and UVC ranges uniformly over the entire duration of application (photostable). It has increased skin compatibility due to the anti-inflammatory properties of zinc oxide and vitamin E-acetate as well as the non-usage of preservatives.

USAGE AND DOSAGE

Apply before exposure to sunlight or UV radiation. For all areas of the skin including the face. Rub in the lotion evenly until white traces disappear. After washing with soap and drying, application must be repeated.

For hands and face: approx. 0.5 - 1 ml respectively.

CONTAINER SIZES

100 ml bottles with hinged cap

1 litre standard bottles

DOSING AIDS

Please refer to pr-Dispenser leaflet.



PRODUCT INFORMATION

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prUV provides effective protection of the skin against UV radiation. Sources of UV radiation include the sun and technical emitters, e.g. electric arc for electric welding or mercury pressure lamps for the drying of paint, hardening of plastics etc. Depending on the type of reaction with the skin, there are three different types of UV rays: long-wave UVA, middle wave UVB and short wave, energetic UVC. The increase of UVC radiation from sunlight due to the breakdown of the ozone layer is under critical discussion among experts. Radiation from all wave lengths can lead to skin cancer.

Therefore effective UV skin protection must include protection against UVA, UVB and UVC radiation.

prUV achieves this by means of the combination of nanodisperse titanium dioxide and zinc oxide fractions. Organic filters have distinct absorption maximums. In the UVC range, their protective effect is insufficient. Preparations with titanium dioxide and zinc oxide, to the contrary, absorb throughout the entire UV range, meaning also in the UVC range.

Due to the radical trap function and thus the erythema-inhibiting effect of the zinc oxide, the combination of titanium dioxide and zinc oxide results in even better skin compatibility. Vitamin E-acetate reinforces this effect.

This skin compatibility is additionally improved by the absence of preservatives.

SKIN COMPATIBILITY

1996 Dermatest, Münster

Patch test (24 hrs.) on 30 test persons with healthy skin. Measurement of the condition of the skin after 24, 48 and 72 hours.

Results: no irritations.

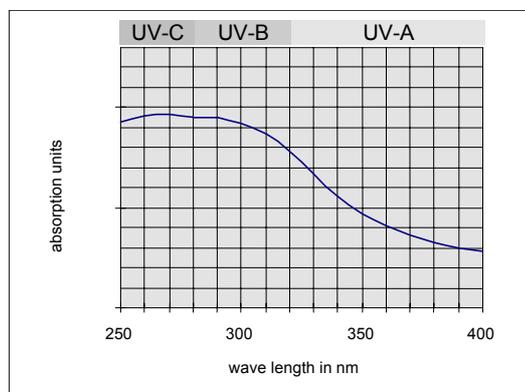
EFFECTIVENESS

1995 Derma Consult GmbH, Alfter

In vivo determination of the light protection factor according to COLIPA (Euronorm) in UVB.

Results: The light protection factor (LPF) of prUV amounts to 20

The protective effect in UVA and UVC was tested following the methods of Diffey in a solution as well as on tape (U. Rath GmbH & Co.KG).



Absorption behaviour of prUV

The absorption in UVB corresponds to LPF 20.

INGREDIENTS (INCI)

Aqua (water), titanium dioxide (and) isopropylmyristate, alcohol denat., Caprylic-capric triglyceride, glycerine, PVP/hexadecene copolymer, tocopheryl acetate, polyglyceryl-2-polyhydroxystearate, zinc oxide (and) mineral oil (and) caprylic-capric triglyceride, isopropylmyristate, octyldodecanol, sodium chloride, panthenol, cera alba, disodium EDTA, parfum (fragrance).

ENVIRONMENT

prUV is highly biodegradable (Hygieneinstitut Gelsenkirchen, October 1996).

Water danger class (self classification): 0.

SAFETY AND REGULATIONS

prUV is not subject to any transport regulations in the meaning of the transport of dangerous goods.

prUV is a cosmetic product and thus subject to the regulations of the German Food and Consumables Act and the EU-Cosmetics Directive.

As a skin protection product, according to Directive 89/656 EU, prUV is classified as personal protective equipment, which must be made available by the employer.

STORAGE

prUV should be stored between 0 und 20 °C. Under these conditions its minimum life amounts to 30 months.