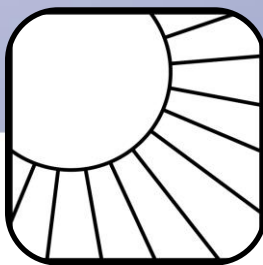


| Protection Class | SPF          |
|------------------|--------------|
| low              | 6-10         |
| medium           | 15-25        |
| <b>high</b>      | <b>30-50</b> |
| very high        | 50+          |

- high protection with SPF 50
- balanced UVA protection UVA
- with vitamin E
- optimal handling, no rubbing necessary, also suitable for hairy sections of the skin
- bottle can be used upside down for reaching sections of the skin which are not easily accessible
- moisturizing
- very water-resistant
- perfume- and fragrance-free
- free from greases



## PHYSIO UV 50 SPRAY

Very water-resistant, fragrance-free sun spray with immediate protection against high natural UV radiation in case of outdoor work

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## PRODUCT PROPERTIES / APPLICATION AREA:

PHYSIO UV 50 SPRAY is a very water-resistant, perfume- and fragrance-free sun spray with high SPF 50 for immediate protection against natural UV radiation. The UVA protection factor is approx. 22.

Since PHYSIO UV 50 SPRAY has a pump that can be used upside down, the transparent liquid can be applied extensively and effortlessly – even to sections of the skin which are not easily accessible, such as the back. Due to its non-greasy formulation, PHYSIO UV 50 SPRAY is especially suitable for protecting large and hairy sections of the skin.

The high and consistent protection is achieved by a modern and photostable UV filter system, which protects the skin from the entire natural UV range very effectively.

PHYSIO UV 50 SPRAY is suitable for outdoor work places with medium to very high natural UV radiation.

The moisturizing formulation can contribute to cellular protection against oxygen radicals which evolve under UV light. PHYSIO UV 50 SPRAY reduces premature skin aging caused by sunlight.

## APPLICATION:

Shake well before use. Before skin exposure to UV radiation, spray evenly on the skin from a distance of approx. 20-30 cm. Rub in, if necessary. Apply amply, small amounts reduce protection considerably.

Apply several times in order to maintain the sunscreen, especially when sweating.

Avoid intensive midday sun and extensive sun exposure. Wear protective clothing and use sunscreens with a high SPF (SPF > 25). Even sunscreens with a high SPF do not provide complete protection against UV radiation. Even when using sun protection agents, avoid staying in the sun for a long time. Sunburn causes lasting skin damages and is to be avoided! Excessive sunbathing is a serious health hazard!

**AVOID CONTACT WITH TEXTILES TO PREVENT PERMANENT STAINING.**

Do not spray directly into the face or the eyes. Do not expose the bottle to direct sunlight and heat. **FLAMMABLE** – contains alcohol. Further information on the application of UV protection products can be obtained on our [website](#).

## PRODUCT DESCRIPTION:

Transparent, very water-resistant spray. Perfume- and fragrance-free. Non-greasy formulation, is absorbed quickly.

## PRODUCT EVALUATION SHEET:

A product evaluation sheet can be downloaded from <https://www.physioderm.com/en/downloads/test-sheets> or is available on request.

## DERMATOLOGICAL COMPATIBILITY:

PHYSIO UV 50 SPRAY's good dermatological compatibility has been carefully tested and proven. A printed certificate is available.

# PHYSIO UV 50 SPRAY

Very water-resistant, fragrance-free sun spray with immediate protection against high natural UV-radiation in case of outdoor work

## EFFICIENCY TEST:

PHYSIO UV 50 SPRAY's efficiency has been proven with regard to:

1. UVB protection factor according to international norm EN ISO 24444 [1]
2. UVA protection factor according to ISO 24443 [2]
3. Water resistance according to COLIPA method of the EU cosmetics manufacturers [3]

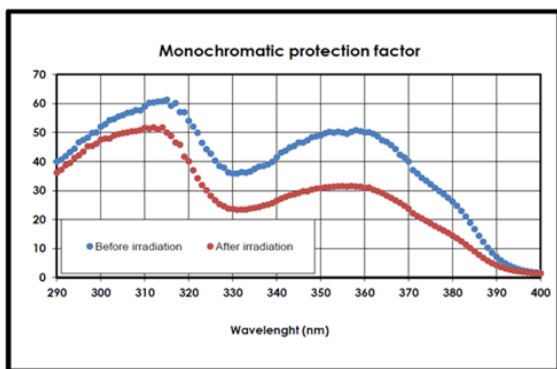


Chart 1 Protection range against UV radiation evaluated for PHYSIO UV 50 SPRAY

### 1. UVB protection factor and sunburn prevention

The UVB protection factor mainly avoids the occurrence of sunburn caused by sun exposure and was formerly the only quality criterion of sunscreens. The sun protection factor (SPF) indicates how much longer you can stay in the sun without getting a sunburn while using the sun protection product, in comparison to the time you could spend in the sun without sunscreen. The SPF is affected by various factors, such as the skin type, the environment (e.g. altitude, latitude, time of the year and time of day) as well as the amount of product applied. **The average UVB protection factor evaluated for PHYSIO UV 50 SPRAY during the in vivo SPF test is 53,6.**

### 2. UVA protection factor against skin aging and light allergies

The UVA protection factor has to be at least 1/3 of the product's protection factor. UVA radiation is a main factor with regard to premature skin aging and different forms of so called „sun allergies“. The wavelength of the sun's UV spectrum is 200 - 400 nm. The ozone layer protects from natural UVC radiation (200 nm - 290 nm). The UVB spectrum is 290 - 320 nm, the UVA spectrum is 320 - 400 nm. Modern sun protection agents cover even a wider UV range and especially the UVA protection factor becomes more and more important. **The UVA protection factor (UVAPF) evaluated for PHYSIO UV 50 SPRAY is 21,02. Thus, the UVA-UVB ratio is 0,424 and the product clearly fulfils the requirements for balanced sunscreen products (UVA-UVB ratio > 0,33).**

### 3. Water resistance

The water resistance according to the European industry standard COLIPA is evaluated by a realistic and controlled bathing test (four times for very water-resistant, 20 minutes each). After bathing, the SPF needs to be at least 50% and, thus, maintain sufficient protection in case of e.g. intensive sweating or bathing (see chart 2). **For PHYSIO UV 50 SPRAY an average of 89,3 % has been evaluated.**

Nevertheless, PHYSIO UV 50 SPRAY should be reapplied especially after bathing or heavy sweating in order to increase the sun-protection safety.

| SPFs                              | SPFw | %WRR | s   | d   | %WRR-d      |
|-----------------------------------|------|------|-----|-----|-------------|
| 53,6                              | 49,1 | 91,3 | 4,4 | 1,9 | 89,3        |
| <b>Water resistance (&gt;50%)</b> |      |      |     |     | <b>89,3</b> |

Chart 2 Water-resistance test according to COLIPA [3]

### References / Norms:

1. EN ISO 24444 Cosmetics - Sun protection test methods - In vivo determination of the sun protection factor (SPF)
2. In vitro Bestimmung des UVA-Schutzes von Sonnenschutzmitteln (ISO 24443)
3. COLIPA Guidelines for Evaluating Sun Product Water Resistance

# PHYSIO UV 50 SPRAY

Very water-resistant, fragrance-free sun spray with immediate protection against high natural UV-radiation in case of outdoor work

## ORDERING DATA:

200 ml Pump-Spray Bottle:  
Art. No. 14286001  
12 x 200 ml Bottle = 1 PU<sup>1)</sup>

1) PU = packaging unit

## PRODUCT QUALITY:

The product is manufactured according to GMP (GOOD MANUFACTURING PRACTICE) requirements. The bacteria count is microbiologically tested on a regular basis and is under 100 bacteria per gram.

## FIRST AID:

If PHYSIO UV 50 SPRAY accidentally gets into your eyes, rinse immediately with plenty of lukewarm water. If a burning sensation still persists, consult an eye doctor as measure of precaution.

## STORAGE INSTRUCTIONS:

PHYSIO UV 50 SPRAY will keep for at least 30 months (from date of manufacture) if stored unopened at room temperature in the original packaging. The Period After Opening (PAO) is indicated on each tube.

## STATUTORY REGULATIONS:

PHYSIO UV 50 SPRAY is subject to the EU Cosmetics Regulation, but not to the German Chemicals Act or the Hazardous Substances Order. Moreover, skin protection products are received as part of the Personal Protective Equipment (PPE).

## ENVIRONMENT:

The bottles are made of PET and after being completely emptied, they can be disposed of with other PET waste. Packaging is labeled accordingly.

## COMPOSITION ACCORDING TO INCI\*:

ALCOHOL DENAT., C12-15 ALKYL BENZOATE, BUTYL METHOXYDIBENZOYLMETHANE, ETHYLHEXYL STEARATE, ISOPROPYL PALMITATE, GLYCERIN, ETHYLHEXYL TRIAZONE, ETHYLHEXYL SALICYLATE, BIS-ETHYLHEXYLOXYPHENOL METHOXYPHENYL TRIAZINE, DIETHYLHEXYL BUTAMIDO TRIAZONE, AQUA, PHENYLBENZIMIDAZOLE SULFONIC ACID, TOCOPHERYL ACETATE, AMINOMETHYL PROPANOL

\* (International Nomenclature Cosmetic Ingredients)

Our information and recommendations correspond to our current state of experience. They are not binding and do neither imply any warranty nor do they establish a contractual relationship. We reserve the right of modifications in line with technological progress and further development of our products. We request our customers to conduct their own tests on our products for fitness for purpose.