





Skin protection lotion with comprehensive UV protection spectrum (UV-A, UV-B and UV-C protection)

- high level of UV-B protection, SPF 30
- UV-A protection according to the new recommendation (UVA) 10 of the EU
- additional UV-C protection



Description

STOKO® UV 30 COMPLETE with sun protection factor 30 is an easily applied, water-resistant UV protection lotion, in particular for people with high exposure to UV, on highly sensitive areas of skin and parts of the skin that are exposed to high levels of risk.

Effective UV protection is essential where skin is exposed to intense radiation from the sun, such as when working outdoors, if direct damage to the skin (erythema) and long-term damage (premature skin ageing, skin cancer) are to be avoided. The protective action of STOKO® UV 30 COMPLETE encompasses the UV-A, UV-B and UV-C ranges. The wide-ranging protective effect of STOKO® UV 30 COMPLETE is achieved by using a modern UV filter combination.

Features and Benefits

Features	Benefits
already at this stage, STOKO® UV 30 COMPLETE meets the new recommendations of the European Commis- sion regarding the UV-A protection; modern UV filter combination with comprehensive protection spectrum	 optimal safety regarding UV-A and UV-B radiation when working outdoors
additional protection against UV-C radiation	 optimal safety when working with UV-C radiation, such as during metallic arc welding or when drying varnishes with the help of UV-C radiation.
contains superior quality ingredients glycerine, creatine, allantoin und vitamin E	 very good skin compatibility, particularly suitable for sensitive areas of skin
free of preservatives	ideal for people who are sensitive to preservatives
good mucosal compatibility and non phototoxic formulation	 optimal product safety for the user, can also be used on the face, no burning in the eyes
light O/W formulation with low percentage of fat	 easy application of the lotion, quickly absorbed by the skin, suitable to be used on the whole body
water-resistant	 the protective effect is maintained during contact with water or when sweating
high stability at > 50°C	a stable formulation with high temperatures
silicone-free	▶ no adverse effects when coating surfaces



The UV-A range (320nm - 400nm)

According to the current standard of knowledge it is especially responsible for long-term damage, first and foremost in the connective tissue, and therefore it is responsible for premature ageing of skin. UV-A radiation results in the formation of free radicals (ROS) in the skin that can damage the tissue structures. The rays are able to penetrate window glass.

The UV-B range (280nm - 320nm)

This part of the spectrum of the sun light is responsible for the formation of a sun or light burn due to the erythematic effects. UV-B radiation has long been known for causing skin cancer. The wave lengths of a UV-B proportion are not able to penetrate window glass.

The UV-C range (190nm - 280nm)

UV-C radiation is a natural part of sunlight, but it is filtered out of the spectrum of sunlight by the ozone layer in the stratosphere.

However, it occurs in relevant concentrations during technical procedures, such as metallic arc welding and is strongly carcinogenic.

Function

STOKO® UV 30 COMPLETE is able to minimise the negative effects of UV radiation due to the balanced filter combination.

STOKO® UV 30 COMPLETE contains a skin care complex consisting of glycerine, creatine, allantoin and vitamin E nourishing the skin sustainably. Vitamin E additionally provides protection against the formation of free radicals. Creatine is an energy donor of the cell produced naturally in the body that amongst others fosters the regeneration of the skin.

STOKO® UV 30 COMPLETE distinguishes itself by the additional protective effect regarding UV-C radiation.

Areas of Use

In case of strong, natural exposure to UV radiation such as in the following applications:

Agriculture (farming, gardening and forestry), building and construction industry (both structural and civil engineering, road building), swimming areas (beaches and open-air pools), shipping (marine and inland waterways).

In case of artificial exposure to UV radiation: In the industry, UV radiation is used for different manufacturing processes. For this, mostly UV-A radiation is generated. However, these sources of radiation mostly also emit proportions of UV-B and UV-C rays.

This comprises of germicidal lamps and printing

machines as well as the hardening of varnishes, plastics and surface coatings using UV light.

To be applied especially in the area of electrical and metallic arc welding processes, as these generate high concentrations of UV-C radiation.

Instructions for Use

STOKO® UV 30 COMPLETE has to be applied to the clean skin before it is exposed to UV radiation.

- As far as possible: avoid intensive midday sun.
- After intensive contact with water or detergents, the lotion has to be reapplied.
- Apply several times, in order to maintain the sun protection, especially after having been in the water.
- ▶ The duration of the protection is not enhanced by applying the lotion several times.
- ▶ Do not apply an amount too small, as small amounts reduce the protective performance.
- ➤ Sun screens can never provide a complete protection, even if they have a very high sun protection factor.

STOKO® UV 30 COMPLETE is suitable for use on the whole body.

NB: Using skin care products does not release you from your duty to take the prescribed protective measures.

Product Description

White, perfumed, unpreserved, silicone-free cream. Emulsion-type: oil-in-water (O/W).

Qualitative Composition*

AQUA (WATER), OCTOCRYLENE, 2-ETHYLHEXYL-SALICYLATE, TITANIUM DIOXIDE, COCOGLYCERIDES, DIETHYLHEXYL CARBONATE, BUTYL METHOXYDI-BENZOYLMETHANE, GLYCERIN, DISTEARYLDIMONIUM CHLORIDE, GLYCERYL STEARATE, POLYGLY-CERYL-6 POLYHYDROXYSTEARATE, POLYGLYCERYL-3 METHYLGLUCOSE DISTEARATE, STEARYL ALCOHOL, POLYQUATERNIUM-37, CREATINE, ALLANTOIN, TOCOPHERYL ACETATE, ISOPROPYL ALCOHOL, TROPOLENE, 1,2-HEXANEDIOL, CAPRYL GLYCOL, PARFUM (FRAGRANCE).

* The ingredient declarations used are in compliance with the International Nomenclature Cosmetic Ingredients (INCI).

Tests Regarding the Efficiency

The sun protection factor 30 on STOKO® UV 30 COMPLETE was determined in accordance with the international procedure regarding the determination of the sun protection factor (COLIPA* - association of the European cosmetics industry), i.e. the treated skin is protected against damage by the sun (erythema/sun burn) 30 times longer than untreated skin (proDERM Institut für Angewandte Dermatologische Forschung GmbH, Hamburg).

The UV-A protective effect of STOKO® UV 30 COMPLETE, at this stage, already meets the new recommendation of the European Commission from 22 September 2006 and the COLIPA, and is at least 1/3 of the stated sun protection factor. The UV-A protective effect was determined according to the in vitro PPD-method (Persistent Pigment Darkening) that was implemented in the German Industry Standard DIN 67502 (corresponds to the Australian Standard AS 2604) in Germany (pro-DERM Institut für Angewandte Dermatologische Forschung GmbH, Hamburg).

On the basis of the Australian Standard, the in vitro protective effect against UV-C radiation was determined (UV-C transmissions measurement, Evonik Goldschmidt GmbH, Essen). In the short wave length range between 190nm and 280nm, STOKO® UV 30 COMPLETE provides a complete absorption (the transmission is zero) of the UV-C radiation (Fig. 1).

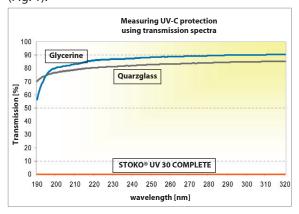


Fig. 1: transmission spectrum of STOKO® UV 30 COMPLETE

Tests Regarding the Product Safety

STOKO® UV 30 COMPLETE provides a good mucosal compatibility and thus is well suited to be applied on the face.

The mucosal compatibility was measured according to the directive of the ECVAM** in the HET-CAM test (toxicological laboratories, Evonik Stockhausen GmbH).

A phototoxicity study as a subject test was conducted with STOKO® UV 30 COMPLETE. The sun screen did not result in any phototoxical reactions and thus is optimally skin friendly (proDERM Institut für Angewandte Dermatologische Forschung GmbH, Hamburg).

Water- and Sweat-resistance

By selecting a new emulsifier system on the basis of a cationic emulsifier for STOKO® UV 30 COMPLETE, a water-resistant emulsion of the oil-in-water type could be produced.

The water resistance was determined according to the EU directives of the COLIPA* (proDERM Institut für Angewandte Dermatologische Forschung GmbH, Hamburg). The water resistance also results in a so called sweat resistance, which is most important for the welder in the forehead and eye area. The water resistance relates to both fresh water and salt water.

Skin Compatibility Tests

STOKO® UV 30 COMPLETE is proven to have very good skin compatibility properties in human-experimental tests and in practical use.

A skin compatibility expert report prepared by the Department of Dermatology, Clinic Krefeld, Germany, is available.

Statutory Regulations

STOKO® UV 30 COMPLETE is governed by the Ordinance Regulating Cosmetics, the Cosmetic Directives of the EC, and is not subject to the Chemicals Act or the Ordinance Regulating Hazardous Substances.

Safety Data Sheet

An EC safety data sheet containing additional product information is available for STOKO® UV 30 COMPLETE. This can be downloaded from www.stoko.com.

Quality Assurance

All of our products meet the bacterial purity standards as they apply to medicines for external use (as defined by PhEur).

< 100 reproducible germs / g product.

Verification tests in this respect are a regular feature of our quality assurance procedures.

First Aid

In the event of accidental eye contact with the product, rinse out using water. Consult a doctor if any burning sensation persists.

Shelf Life

STOKO® UV 30 COMPLETE can be stored in an unopened container at room temperature for at least 30 months. Shelf life after opening: see indication on packaging.

Additional Information

Expert report and bibliographies are available upon application.

Packaging Size

100 ml tube

[®] registered trademark

^{*} COLIPA (The European Cosmetic, Toiletry and Perfumery Association)

^{**} ECVAM (European Centre for the Validation of Alternative Methods)

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing ofincoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in thesole responsibility of a customer.

Evonik Stockhausen GmbH STOKO® Skin Care Bäkerpfad 25 · 47805 KREFELD Postfach 10 04 52 · 47704 KREFELD GERMANY PHONE +49 21 51 38-15 92/18 50 FAX +49 21 51 38-12 88 e-mail stoko@evonik.com www.stoko.com · www.evonik.com Contact UK
Evonik Goldschmidt UK Ltd.
Tego House, Chippenham Drive
Kingston, Milton Keynes
BUCKS MK10 OAF
UNITED KINGDOM
PHONE +44 84 51 28 95 60
FAX +44 19 08 58 80 48
e-mail stoko-uk@evonik.com
www.stoko.com · www.evonik.com