



Special care for demanding skins





Special treatments for demanding skins

From the most advanced innovation in Swiss cosmetological research, a range of treatments formulated to take care of the most **demanding skins**, effectively and gently.

Under stressing environmental conditions, lifestyle factors, psycho-emotional states, hormonal unbalances or during drugs' usage, the skin can over-react to external stimuli, becoming sensitive, dry and suffer from itching, burning, stinging or tightness.







Exposure to sun may contribute to a harshening of such conditions, on top of representing the major cause of photo-ageing, if not controlled. In dry and sensitive skins the natural moisture-retaining barrier is impaired, leading to increased **Trans Epidermal Water Loss (TEWL)**, pH unbalances, redness and irritations, and to a fragile appearance.

If not prevented or treated, more serious conditions, such as rashes, eczema, atopic dermatitis or xerosis, may appear. As part of an overall skincare regimen, treatments can contribute to **prevent**, **sooth or fight dryness significantly**.

With a regular use of products, **dry** and **sensitive** skin will feel soft, smooth, moist and protected, in a word healthier! **6 products**, to choose the most appropriate to each skin condition.











Gentle Cleansing Milk



Bottle 300ml with box & PIL

A **soap-free** cleansing lotion ideal for face and body, with **soothing and softening** action, formulated with a **mild**, **non-irritating milky texture**.

Excellent to gently cleanse even the most sensitive skins, including rosacea-prone skins.

Helps to maintain the skin's natural moisture balance and calms sensitivity





Gentle Cleansing Milk



Application tips:

Gently massage onto skin, rinse off with cool or lukewarm water and pat the skin dry with a towel. Suitable for all skin types

Active ingredients:

JOJOBA OIL, emollient and moisturizing agent of the lipophilic layer;

SHEA BUTTER, contributing to skin nourishing; **UNDECYLENAMIDE DEA**, with anti-bacterial, anti-microbial, anti-fungal properties.

Skin-friendliness claims:

Free from PARABENS - PEG/PPG - SLS/SLES - SILICONS - ALCOHOL - MINERAL OILS - COLORING AGENTS

Fragrance free
Non comedogenic





Moisturizing Lotion





- Bottle 500ml with pump
- Bottle 300ml with snap-on cap with box & PIL

Gentle, non-irritating, non-greasy lotion with moisturizing, soothing, nourishing action, excellent to recondition and deeply hydrate dry and sensitive skin and to protect it from oxidization processes.

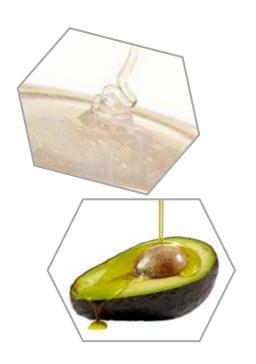
Ideal for hands, feet, elbows and knees and appropriate also for facial use.

Provides **long-lasting relief** even to severely dry skin, a condition often associated with eczema and psoriasis related disorders.





Moisturizing Lotion



Application tips:

Gently massage onto dry skin, until fully absorbed, preferably directly after bathing, wetting the skin or washing hands. Apply daily, once or twice, or whenever the need is felt. Suitable for all skin types, also for sensitive and dry skins prone to eczema and irritations.

Active ingredients:

AVOCADO OIL, with anti-oxidant action, boosting collagen production and thus supporting skin rejuvenation;

GLYCERIN, with moisturizing and soothing properties; **VITAMIN E** and **PRO-VITAMIN B5**, contributing to skin softness, elasticity and restructuring.

Skin-friendliness claims:

Free from: PARABENS – SLS/SLES – MINERAL OILS – COLOURING AGENTS – LANOLIN.

Fragrance free. Non comedogenic.



Moisturizing Cream





- Jar 500ml
- Jar 250 with snap-on cap with box & PIL
- Tube 100ml with box & PIL

Rich, non-greasy cream with moisturizing, soothing, nourishing action, excellent to recondition and deeply hydrate dry and sensitive skin.

Ideal for hands, feet, elbows and knees and appropriate also for facial use.

Provides **long-lasting relief** even to severely dry skin, a condition often associated with eczema and psoriasis related disorders.





Moisturizing Cream



Application tips:

Gently massage onto dry skin, until fully absorbed, preferably directly after bathing, wetting the skin or washing hands. Apply daily, once or twice, or whenever the need is felt. Suitable for all skin types, also for sensitive and dry skins prone to eczema and irritations.

Active ingredients:

ALMOND OIL and **GLYCERIN**, with moisturizing and soothing properties;

VITAMIN E, contributing to skin softness, elasticity and restructuring.

Skin-friendliness claims:

Free from: PARABENS – SLS/SLES – MINERAL OILS – COLOURING AGENTS – LANOLIN

Fragrance free.





Hand Cream



Tube 100ml with box & PIL

Long-lasting, non-greasy, moisturizing cream with softening and nourishing action, excellent to deeply hydrate dry, chapped hands for an immediate and long-lasting effect.

The combined action of its active ingredients make the cream ideal to treat sensitive skins.

The delicate texture leaves the skin **smooth and velvety.**





Hand Cream



Application tips:

Apply onto dry hands, rubbing in gently, until fully absorbed. Apply daily, whenever the need for hydration is felt. Suitable for all skin types, especially for rough and dry skins.

Active ingredients:

PSEUDOALTEROMONAS EXOPOLYSACCARIDES, rich in glucuronic acid, act as powerful moisturizing agents with a high water retaining capacity, providing an immediate and long-lasting effect; SHEA BUTTER, to lock in moisture; GLYCERIN, with moisturizing and soothing properties;

VITAMIN E, contributing to skin softness, elasticity and restructuring

Skin-friendliness claims:

Free from: PARABENS – SLS/SLES – MINERAL OILS – COLOURING AGENTS – LANOLIN.

Fragrance free. Non comedogenic.



Performance, effectiveness and safety of sun protection products are related to 2 major factors

Quality and nature of filters used

Chemical or Physical:

- ✓ Chemical filters ABSORB radiation, granting a higher performance and effectiveness, an increased safety (due to a reduced penetration into skin).
- ✓ Physical filters REFLECT radiation.

Formulation basis

- ✓ Interaction with solvents, emulsifiers, bulking agents impacts on filters' stability, bioavailabily and time coverage.
 - ✓ Low performance solvents hamper filters' coverage.
- ✓ A more or less homogeneous dispersion of filters in the emulsion impacts on uniformity on skin during application.

Best products shall also guarantee a pleasant texture and skin feel: non-sticky, transparent film (low "white effect"), quickly absorbed





Which UV filters?

AVOBENZONE	chemical / organic	4%
BISOCTRIZOLO	chemical / organic	6%
SULISOBENZONE	chemical / organic	2%
OCTINOXATE	chemical / organic	5%
HOMOSALATE	chemical / organic	4%
OCTOCRYLENE	chemical / organic	6%
ENSULIZONE	chemical / organic	2.5%
		29.5%

The lower the total amount, the higher the performance (> efficiency)





The importance of a double screen: UVB & UVA

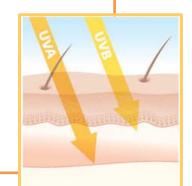
UV-B radiation: between 280 and 320 wavelength (mm)

Short-term damages: ✓ sunburn

✓ rash

✓ photosensitizing

✓ heatstroke



UV-A radiation: between 320 and 400 wavelength (mm)

Long-term damages: ✓ accelerated photo-ageing

✓ immune system alteration

✓ skin cancer





Which kind of protection?

Category indicated on products	SPF indicated on products	Measured SPF	Minimum recommended UVA protection
LOW protection	6	6 - 9,9	
	10	10 - 14,9	
MEDIUM protection	15	15 - 19,9	1/3 of the sun
	20	20 - 24,9	protection factor
	25	25 - 29,9	indicated on the
HIGH protection	30	30 - 49,9	label
	50	50 - 59,9	
VERY HIGH protection	50+	60 >	

Laboratory calculations (IN VIVO tests complying to ISO 24442-3-4 regulations) allow to simulate (i.e. exactly measure) the SPF (UVB and UVA) guaranteed by each product, starting from the percentages of the filters used in the formulation



Which kind of protection?



UVB

BASF Sunscreen Simulator

SPF, UVA-Metrics, Protection Profile, Real-Life Calculations



www.basf.com/sunscreen-simulator

1					100		Duoi.	v	iii/ouii	50.0	JII JIII	laiatoi
	Region: E Application amount: 2	urope .0 mg/cm²					Date:	201	4/10/08 11:30:54			
	UV Filter composition							N				14
Input	Butyl Methoxydibenzoylmethane Methylene Bis-Benzotriazolyi Tetramethylbutylphenol (nano), Tinosorb M, active Benzophenone-4 (Uvinul MS40) Ethylhexyl Methoxycinnamate (Uvinul MC80) Homomenthyl Salicylate Octocylene (Uvinul NS39T) Phenylbenzimidazol Sulfonic Acid						USAN name Abbreviation Avobenzone BMBM Bisochrizole MBBT Sullisobenzone BP4 Octinoxate EHMC Homosalate HMS Octocylene OCR Ensulizole PBSA Total:		Amount 4 % 6 % 2 % 5 % 4 % 6 % 2.5 %			
SPF		SPF (ISO 24444): 60.2 Rating: 50+ Fiter efficiency: 2.0 (SPF/% UV Filter)					The UV	Simulation of the sun protection factor in vivo (SPF, ISO 24444) is performed. A description of the calculations is given in: In sitio Determination of Topical Sun Protection*, Bernd Herzog and Uli Osterwalder, Cosmetic Science Technology 2011, 62 - 70 The UV Filter efficiency is the ratio of SPF and total UV Filter concentration (in %). The higher this value, the less Filter is required to achieve a certain SPF. This means a higher degree of freedom in the choice of other ingrederist is a sunscreen formulation.				
Comparison of Solar Simulator and Real-Life Sunlight	in s	re UVB sunlight for sical testing	Solar Spectra Clinical and Real-Life	Arbitrary 1.2 1.0 0.8 0.6 0.4 0.2 0.2 280	UVB UVB	UV/		360	UVAI 380 400 Wavelength nm	More UVA in Real-Lif sunlight f clinical ter (e.g. COL Real-Lifes midsumm sunlight a	or sting IPA) = midday	
Real-Life Calculations	Real-Life Sunburn Protection Factor (calculated with midday midsummer sunlight at 40°N) SPF (Real-Life): 55.1 Rating: 50 Transmitted UV Dose at 1 MED: 16.4 J/cm² Normalized Transmitted UV Dose at 1 MED: 2.1				>400 nn using a Real-Lift in the ca The irra Transmi properti same st An 'idea In such normali	The SPF in vivo method (ISO 24444) uses as irradiation source a solar simulator with a cut-off of radiation 3400 mt, thus emitting also far less IAVA rediation than the sun. In contrast, the real-life SPF is calculated using a standard solar spectrum with full IAVA content. Since suncereas any commonly IAVB based, the Real-Life SPF is smaller than the SPF obtained with the solar simulator. The two SPFs are only the same in the case of the "ideal sunscreen" with spectral homeostasis. The irradiance of the sun is stronger in the UVA range than in the UVB range. Therefore, the total Transmitted UV Dose (from 290 to 400 mm) after having received 1 MED depends strongly on the spectral properties of the applied sunscreen. The Transmitted UV Dose of the 1 MED is a calculated in Jeffm' using the same standard solar spectrum as for the Real-Life SPFs (filter with the same protection at any wavelength, in such a case the Transmitted UV Dose of the Dose a value of 7.9 Jeffm. This value is used to normalize the Transmitted UV Dose of B 1 MED. The closer the normalized value comes to 1, the more ideal is the spectral profile of the respective sunscreen.						

BASF Personal Care and Nutrition GmbH, D-40789 Monheim am Rhein, Germany, sunscreen-simulator@basf.com
This occurrent, or any answers or information provided herein by BASF, does not constitute a legally binding obligation of BASF. While the descriptions, designs, data and information contained herein are presented in good faith and

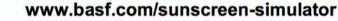
his document, or any answers or information provided herein by BASE, does not constitute a legally printing obligation of the SASE. While the descriptions, designs, data and information contained herein are presented in good faith and interest to be accurable, it is provided for your guidance only. Because many factors may affect processing or application thus, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to set. It does not relieve our customers from the obligation to perform a full inspection of the products upon delivery or any other obligation. NO WARRANTIES of ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES FE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR WARRANTIES FE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART

Which kind of protection?

BASF Sunscreen Simulator

SPF, UVA-Metrics, Protection Profile, Real-Life Calculations









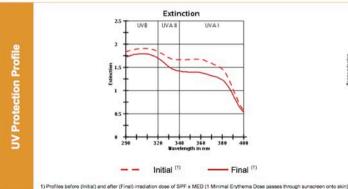


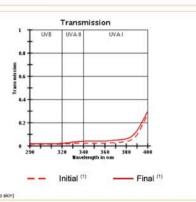
SPF (ISO 24444): 60.2

Rating: 50

Simulation of the sun protection factor in vivo (SPF,ISO 24444) is performed. A description of the calculations is given in:
"In silico Determination of Topical Sun Protection", Bernd Herzog and Uli Osterwalder, Cosmetic Science Technology 2011, 62 - 70

	Country		in vivo	in vitro	Rating	
	+	CH UVA-PF/SPF: 0.32		EC Recommendation (UVA-PF/8PF > 0.33) UVA-PF (80 24443): 21.5 UVA-PF/8PF: 0.36 Critical wavelength: 378.0 nm		
UVA-Metrics	**	AUS MERCOSUR	UVA-PF and ratio calculation with labeled SPF Labeled SPF: -	(Method: Cosmetics Europe) UVA-PF (ISO 24443): - UVA-PF/SPF: -		
		G8		Boots Star-Ratino UVA/UVB ratio w/o irradiation: 0.79 with irradiation: 0.79	@	
-	•	JР	JCIA Rating UVA-PF (ISO 24442): 19.2		PA++++	
		USA		FDA Final Rule Critical wavelength; 379.0 nm	Broad Spectrum decreases the risk of skin cancer and early skin aging caused by the sun	
		Global		No global standard has been defined		





actual

An "ideal sunscreen" would perform like a neutral density filter with the same protection at any wavelength. In such a case the Transmitted UV Dose at 1 MED has a value of 7.9 J/cm². This value is used to normalize the Transmitted UV Dose @ 1 MED. The closer the normalized value comes to 1, the more ideal is the spectral profile of the respective

BASF Personal Care and Nutrition GmbH, D-40789 Monheim am Rhein, Germany, sunscreen-simulator@basf.com

This document, or any answers or information provided herein by BASF, does not constitute a legally binding obligation of BASF. While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or applicationises, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. It does not receive our customers from the obligation to perform a full responded by the products upon elevely or any other obligation. NO WARRANTES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF AMY KIND, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OR IMPLIED, ETIHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OR IMPLIED, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OR IMPLIED, INCLUDING WARRANTIES, INCLUDING W

Final (1)



Conclusions

Filters used: 29,5% - only chemical

Filters' efficacy: 2%

UVB IN VIVO: 60,2 = SPF 50+

UVB REAL LIFE: 55,1 = SPF 50

UVA: **19,2 (in vivo) – 21,5 (in vitro)**

✓ Extremely STABLE emulsion: only 9% SPF decay from "in vivo" to "real life" test

✓ UVB: 50+ ✓ UVA: approved





Nourishing Face Cream SPF50+ UVB / UVA protection



Tube 50ml with box & PIL

High-tolerance nourishing and hydrating cream, especially formulated to protect against UVB and UVA radiation

Helps to prevent sunburn, rashes and long-term UV-induced skin ageing and damage.

Non-greasy, non-irritating, quickly absorbed texture suitable for all skin types.





Nourishing Face Cream SPF50+ UVB / UVA protection



Application tips:

Apply evenly onto dry skin, daily, once or more, preferably before and during sun exposure. Avoid contact with eyes. Keep out of the reach of children. Avoid direct contact with fabrics and hard surfaces to prevent staining.

Active ingredients:

With UV filters: AVOBENZONE (4%),
BISOCTRIZOLO (6%), SULISOBENZONE (2%),
OCTINOXATE (5%), HOMOSALATE (4%),
OCTOCRYLENE (6%), ENSULIZONE (2,5%).
Enriched with GLYCERIN and VITAMIN E.

Skin-friendliness claims:

Free from: PARABENS - SLS/SLES - ALCOHOL - MINERAL OILS - COLOURING AGENTS

Fragrance free.

Non comedogenic.





Hydrating Face Lotion SPF50+ UVB / UVA protection



Bottle 65ml with spray pump with box & PIL

High-tolerance hydrating lotion, especially formulated to protect against UVB and UVA radiation

Helps to prevent sunburn, rashes and long-term UV-induced skin ageing and damage

Lightweight, non-irritating, quickly absorbed texture suitable for all skin types, suitable also for body.





Hydrating Face Lotion SPF50+ UVB / UVA protection



Application tips:

Apply evenly onto dry skin, daily, once or more, preferably before and during sun exposure. For external use only. Avoid contact with eyes. Keep out of the reach of children. Avoid direct contact with fabrics and hard surfaces to prevent staining.

Active ingredients:

With UV filters: AVOBENZONE (4%),
BISOCTRIZOLO (6%), SULISOBENZONE (2%),
OCTINOXATE (5%), HOMOSALATE (4%),
OCTOCRYLENE (6%), ENSULIZONE (2,5%).
Enriched with GLYCERIN and VITAMIN E.

Skin-friendliness claims:

Free from: PARABENS – SLS/SLES – ALCOHOL - MINERAL OILS – COLOURING AGENTS

Fragrance free
Non comedogenic



swiss beauty engineering

Reef Cosmetics SA

Via Vite, 3 - CH-6855 Stabio - Switzerland

Ph.: + 41 (0) 91 2208680

Fax: +41 (0) 91 2208685

E-mail: info@reefcosmetics.ch

www.reefcosmetics.ch