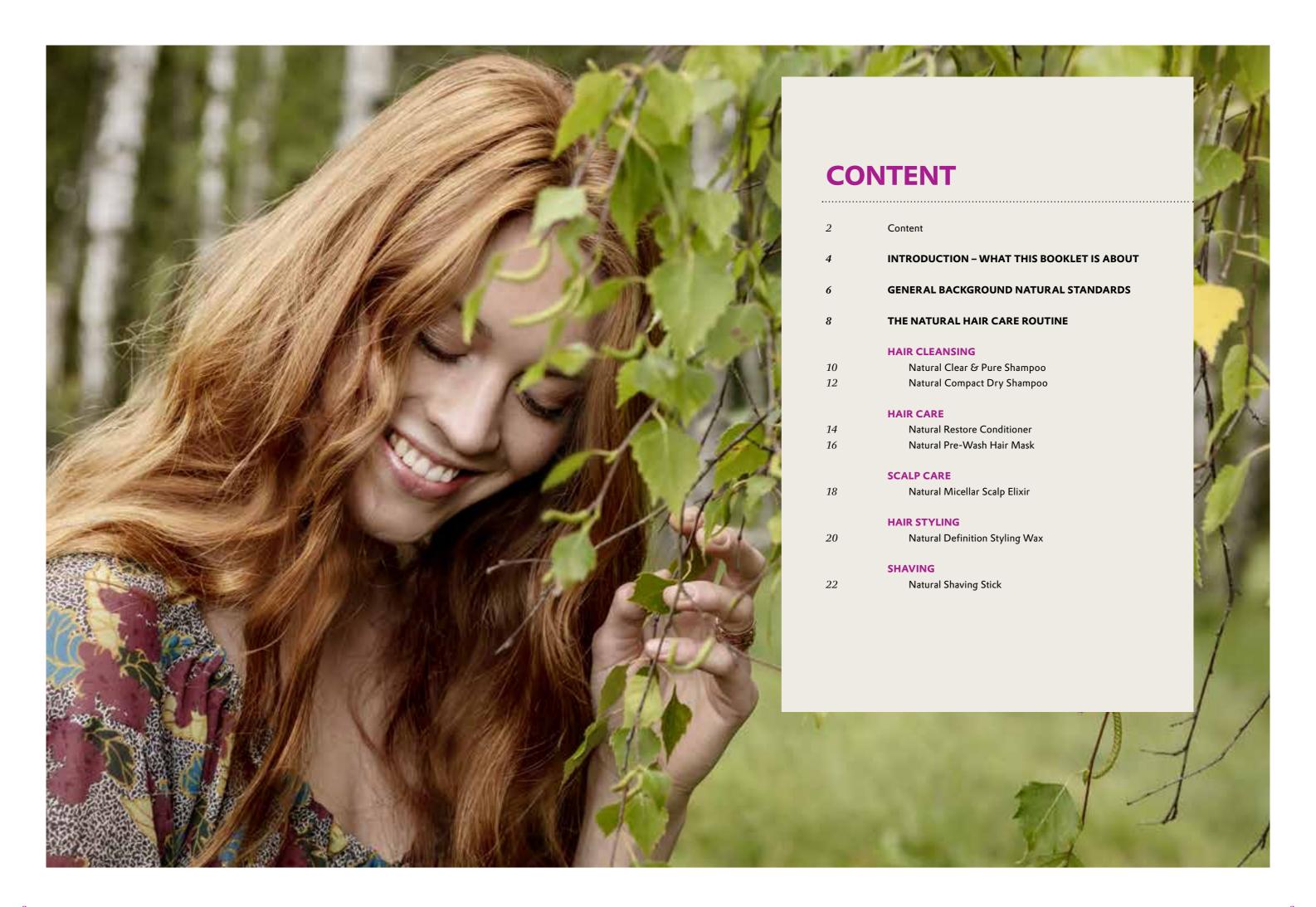
# A NATURAL FORMULATOR'S GUIDE

The Natural Hair Care Routine – 2020 Edition



dr.straetmans® 0





### **INTRODUCTION –**

# what this booklet is about

While an increasing proportion of consumers seek natural ingredients in their cosmetic products, there is also growing skepticism about greenwashing claims and confusion about product safety.

One way that cosmetic manufacturers can take some of these consumer concerns into account is to follow the guideline of a natural certification standard, with defined criteria for ingredients and formulation compositions.

In the development of natural cosmetics there are certain product groups that pose special challenges for the formulator. Hair care is amongst them with many different requirements regarding the functionality. The goal is to find a balance between the different properties in one product, from sensory to application, rinsability and performance.

The hair care category is also one of the fastest growing segments in the market for personal care products. That is why we wanted to share with you our latest examples on how to create products for a **natural hair care routine**. We can help you to find sophisticated basic products that are at the heart of every routine, as well as discover solutions to trendy formulation ideas that are novel to the market for natural cosmetics.



## Find here some **GENERAL BACKGROUND**

for your orientation:



#### NATURAL COSMETICS CERTIFICATION STANDARDS

# **COSMOS**

Natural

### **DEVELOPED ACCORDING TO OUALITATIVE** AND QUANTITATIVE REQUIREMENTS OF **COSMOS NATURAL\***

The **COSMOS**-standard is in force since January 2010. The overall goal is to define and implement a standard for organic and natural cosmetics. The guiding principles are promoting organic agriculture, saving resources, using clean and gentle processes and developing the concept of "Green Chemistry". The **COSMOS** standard is available either for organic products or for natural products. The prototype formulations within this booklet are developed according to **COSMOS** Natural.

The selection of ingredients is an important element in the formulation of a cosmetic formulation according to the **COSMOS** standard. There are guidelines on the origin and approved processing procedures of the ingredients. Raw materials with an organic content need to be certified, involving audit processes, while materials with no organic content have to be approved involving a desk-based screening of information.

Besides the choice of ingredients, it is also of importance that the composition of the total product is considered. Under **COSMOS** Natural, the amount of petrochemical moieties is limited to a maximum of 2% while the remaining ingredients need to be of natural origin. There is no specification on the organic compounds, which is covered with the COSMOS Organic standard.

For the development of the prototype formulations in this booklet, we selected ingredients that have COSMOS approval based on the information available to us at the time of the formulation process.

For detailed information, please refer to https://cosmos-standard.org/

#### NATURAL COSMETICS CERTIFICATION STANDARDS

## **NaTrue** Natural Cosmetics

### **DEVELOPED ACCORDING TO OUALITATIVE** AND QUANTITATIVE REQUIREMENTS OF NATRUE NATURAL COSMETICS\*

The **NaTrue** Standard is developed by the **NaTrue** Scientific Committee Criteria and Label, an international non-profit organization with the goal to protect and promote natural and organic cosmetics globally. It differentiates its certification into three different categories: "natural cosmetics", "natural cosmetics with an organic portion" and "organic cosmetics".

For the selection of ingredients, the **NaTrue** Standard differentiates between natural substances, nature-identical substances and derived natural substances, with a list of approved treatment processes. Furthermore, there are positive lists available for nature-identical substances, comprising pigments, minerals and preservatives.

The requirements for the composition of a cosmetic formulation are focusing on minimum amounts of authentic natural substances and a maximum allowed amount of derived natural raw materials within the whole formulation. There are different requirement for various types of cosmetic products, e.g. water-free products or emulsions.

For the development of the prototype formulations within this booklet, we selected ingredients and composed the formulations according to the NaTrue "Natural Cosmetics" (Level 1) based on the information available to us at the time of the formulation process. Please note that the ingredients are to our knowledge suitable for the NaTrue requirements, but not necessarily certified by NaTrue.

For detailed information, please refer to http://www.natrue.org/

#### NATURALITY CALCULATION PROCEDURE

### ISO 16128

### **NATURAL ORIGIN CONTENT** > 0.95 CALCULATED **ACCORDING TO ISO 16128\***

With the ISO 16128, an industrial norm on "Guidelines on technical definitions and criteria for natural and organic cosmetic ingredients and products" became available. The ISO norm consists of two parts. Part 1 provides definitions for different ingredient categories. Part 2 describes the procedure on how to calculate the naturality of ingredients and the natural origin content of a cosmetic formulation, based on the amount of natural components in each raw material.

For all prototype formulations in this booklet, the Natural Content c<sub>a</sub> and the Natural Origin Content c<sub>a</sub> is calculated and indicated together with the formulations.

In order to demonstrate the implications of the **ISO 16128** norm for cosmetic products, we also developed prototype formulations with a calculated c<sub>so</sub> of a minimum of 0.95 or even higher. These formulations are marked with the following expression: Natural Origin Content > 0.95 calculated according to ISO 16128. In case a formulation meets a minimum  $c_{no}$  of 0.98, we name it natural.

The ISO standard 16128 is protected by copyright. For information on how to access the full content, please refer to https://www.iso.org/

\*Any reference of personal care products to the natural cosmetics certification standards can only be made in conjunction with an individual product certification by an authorized certification body. These prototype formulations only serve demonstration purposes.

# HAIR CARE TOPICS - The natural hair care routine

### 1. HAIR CLEANSING



### THE BASIC STEP: SHAMPOO

The foundation of every hair care routine. Relieves the scalp and roots from sebum, and lifts dirt and smell from the hair.

For natural hair care products, the combination of a cleansing shampoo with a matching conditioner is an ideal solution to get the best performance out of each product.



2. HAIR CARE



### THE PARTNER YOU NEED: CONDITIONER

After shampooing it can be applied targeted to the lengths and tips where the care is needed most.

### THE EXTRA: TREATMENT MASK

**REFRESHMENT BETWEEN WASHES:** 

**DRY SHAMPOO** 

This little helper gives instant refreshment to the strands

and elongates the time until the next hair wash is needed.

Rich and nourishing care to boost moisture and revive stressed hair.

### 3. SCALP CARE



#### TAKE CARE UP THERE: SCALP TONIC

Scalp care is getting more into focus to improve wellbeing or tackle specific hair and scalp conditions. A tonic can help to soothe the skin of the scalp and deliver targeted active ingredients to the hair roots.

### 4. HAIR STYLING



### **EVERYTHING IN PLACE: HAIR WAX**

Finishing the look of the hair by styling is the next step to prepare for the day. A wax enhances the look of the hair by accentuating parts and giving texture.

### 5. SHAVING



### THIS IS HAIR CARE, TOO! SHAVING STICK

Regardless of gender, most consumers need a product that helps to protect the skin while shaving. Discover our natural and trendy solution.



### NATURAL CLEAR & PURE SHAMPOO L105-4.63-0120

Claims: Transparent shampoo formulation with pleasant viscosity and flow characteristics

With well balanced surfactant composition and good caring properties

Natural content c<sub>n</sub>: 55.7%, Natural origin content c<sub>n</sub>: 99.4% (incl. water, ISO 16128)

Phase	Ingredient	INCI (EU)	Supplier	%
Α	Texapon K 30 UP / MB	Aqua; Sodium Coco-Sulfate	BASF	13.32
	Amisoft CS-22	Aqua; Disodium Cocoyl Glutamate; Sodium Cocoyl Glutamate	Ajinomoto	5.00
	Plantacare 1200 UP	Lauryl Glucoside; Aqua	BASF	11.04
	TEGO® Betain F 50	Aqua; Cocamidopropyl Betaine	Evonik	2.00
	Glycerin 99.5 %	Glycerin	Cremer Oleo	5.00
	Perfume	Parfum	diverse	0.20
	dermofeel® P-30 MB	PCA Glyceryl Oleate	Evonik	0.50
	TEGO® Remo 95 MB	Sorbitan Caprylate; Glyceryl Oleate	Evonik	1.10
	dermofeel® sensolv MB	Isoamyl Laurate	Evonik	0.10
В	Deionised Water	Aqua		53.34
	TEGO® Natural Betaine	Betaine	Evonik	4.00
	dermofeel® PA-3	Sodium Phytate; Aqua; Alcohol	Evonik	0.10
	Verstatil® BL non GMO	Aqua; Sodium Levulinate; Sodium Benzoate	Evonik	2.00
С	Citric Acid (sol. 20%)	Aqua; Citric Acid	diverse	2.30
			-	100.00

### Processing:

- 1. Add the components of phase A in the given order and stirr to uniform.
- 2. Add phase B to phase A. Stirr to uniform.
- 3. Adjust the the pH-value with phase C.

### Specification:

Appearance: Clear, viscous shampoo

pH-value: 5.2 - 5.4

Viscosity (Brookfield (21°C): RV4; Speed 100 rpm): 5000 - 8000 mPas

Stability test: passed

Microbiological safety: challenge test passed

### 1. HAIR CLEANSING



### THE FORMULATION AND ITS APPLICATION

This clear shampoo formulation lays the baseline of the hair care routine. The well-flowing gel with a smooth consistency is easy to dispense. It builds a fine-pored foam and has good cleansing properties while being gentle to hair and scalp.

#### Application:

Wet the hair thoroughly with warm water. Massage the shampoo to the roots and those parts of the hair that need cleansing. Rinse off and make sure there are no foam residues. Follow with a conditioner.

### HINTS ON CHALLENGES AND TECHNOLOGY

- Pleasant and smooth gel texture with excellent rheological properties
- Natural compliant surfactant matrix that balances out cleaning performance, gentleness and foam characteristics
- Transparency of the formulation
- Incorporation of natural conditioning agents to improve the manageability of the hair
- Selection of a preservation system suitable for a rinse off formulation

### **TRENDS AND MARKETING OPPORTUNITIES**

### MINIMALISM & SIMPLICITY

A basic shampoo as THE central product in a hair care product line

### **GENDERLESS & INCLUSIVITY**

A functional product made for everyone

### TRANSPARENCY - LITERALLY

Easy to understand composition with low number of ingredients

\* See page 6 and 7

### NATURAL COMPACT DRY SHAMPOO L105-9.22-0120

Pressed powder for refreshing greasy hair strands and roots Claims:

With a combination of natural sebum absorbing ingredients

Natural content c<sub>a</sub>: 29.2%, Natural origin content c<sub>a</sub>: 100% (incl. water, ISO 16128)

Phase	Ingredient	INCI (EU)	Supplier	%
A	Tapioca Natural	Tapioca Starch	Agrana	15.00
	ImerCare 04K	Kaolin	Imerys	20.00
	Spherilex® 10 PC	Hydrated Silica	Evonik	42.50
	Magnesium stearate, veg. grade_ Parteck LUB MST Emprove	Magnesium Stearate	Merck	2.50
	TEGO® Feel C 10	Cellulose	Evonik	10.00
В	dermofeel® sensolv MB	Isoamyl Laurate	Evonik	4.30
	Castor Oil, refined	Ricinus Communis Seed Oil	Henry Lamotte	4.00
	Perfume	Parfum	diverse	0.50
	dermosoft® GMCY MB	Glyceryl Caprylate	Evonik	1.00
	dermofeel® Toco 70 non GMO	Tocopherol; Helianthus Annuus Seed Oil	Evonik	0.20
				100.00

### Processing:

- 1. Premix phase A and grind it two times for 20 sec. in a mill.
- 2. Premix phase B and add to phase A.
- 3. Grind all in a mill for 20 sec., two times.

### Specification:

Appearance: Off-white, pressed powder

Stability test: passed

### 1. HAIR CLEANSING



### THE FORMULATION AND ITS APPLICATION

Sometimes, hair strands need a little refreshment in the course of the day. In this case a dry shampoo proves itself practical: a powder product that absorbs oil from greasy parts and restores the look of clean hair.

Dry shampoo now comes in an even more convenient format – a compact. Easy to use and with advantages in comparison to loose powders or aerosols.

### Application:

This pressed compact powder comes in a typical container together with a little applicator. The tool helps picking up the product and applying it accurately to greasy strands. The white powder distributes finely in the hair. After a few strokes with the fingers or a brush it will become invisible. For light and dark hair colors.

### HINTS ON CHALLENGES AND TECHNOLOGY

- · Combination of different natural compliant solid particles with sebum absorption function
- Outbalanced combination for sebum absorption function without leaving the hair dull or dusty
- · Natural based oil phase to enable pressing of the powder and with hair caring properties
- Product protection system for water-free and pigment containing products

### **TRENDS AND MARKETING OPPORTUNITIES**

### **ACTIVE LIFESTYLE**

Refreshes the hairstyle between appointments

### **SELFIE-READY EVERYWHERE**

The product can be used in any situation No staining on clothes

### **GLOBETROTTER**

Ideal for travelling: neither aerosol, nor liquid

\* See page 6 and 7

13

### NATURAL RESTORE CONDITIONER L105-10.17-0819

Claims: Rich hair conditioner cream

Gives shine and smoothness without weighing down the hair

Natural content c<sub>a</sub>: 80.9%, Natural origin content c<sub>a</sub>: 99.6% (incl. water, ISO 16128)

Phase	Ingredient	INCI (EU)	Supplier	%
A	Deionised Water	Aqua		77.80
	dermofeel® PA-3	Sodium Phytate; Aqua; Alcohol	Evonik	0.10
	Glycerin 99.5%, Ph. Eur.	Glycerin	Cremer Oleo	2.00
В	Amigum	Sclerotium Gum	Alban Muller	0.30
С	TEGO® Care PBS 6 MB	Polyglyceryl-6 Stearate; Polyglyceryl-6 Behenate	Evonik	2.50
	TEGO° Alkanol 1618 MB	Cetearyl Alcohol	Evonik	4.00
	dermofeel® sensolv MB	Isoamyl Laurate	Evonik	1.00
	VARISOFT° EQ 65 MB	Distearoylethyl Dimonium Chloride; Cetearyl Alcohol	Evonik	3.00
	dermosoft® GMCY MB	Glyceryl Caprylate	Evonik	0.30
	Hairflux <sup>®</sup>	Olea Europaea Fruit Oil; Ricinus Communis Seed Oil; Ceramide Ng	Evonik	1.00
	TEGOSOFT® DC MB	Decyl Cocoate	Evonik	2.50
	Coconut Oil, pressed, organic	Cocos Nucifera Oil	Henry Lamotte	1.00
	dermofeel® P-30 MB	PCA Glyceryl Oleate	Evonik	1.00
D	dermosoft <sup>®</sup> 1388 eco	Glycerin; Aqua; Sodium Levulinate; Sodium Anisate	Evonik	3.00
Z	Perfume	Parfum	diverse	0.50
				100.00

100.00

### Processing:

- 1. Heat phase A up to 78 °C. Disperse phase B into phase A.
- 2. Heat phase C up to 78 °C.
- 3. Emulsify phase C into phase A/B while stirring.
- 4. Homogenize.
- 5. Start to cool down fast under medium stirring.
- 6. Add phase D and phase Z below 40  $^{\circ}$ C.
- 7. Adjust the pH-value.

### Specification:

Appearance: White, smooth cream

pH-value: 5.2 - 5.4

Viscosity (Brookfield (21°C): TC: Speed 10 rpm): 80000 - 130000 mPas

Stability test: passed

Microbiological safety: challenge test passed

### 2. HAIR CARE



### THE FORMULATION AND ITS APPLICATION

This conditioner is the perfect second step of the natural hair care routine. The base is an O/W emulsion with higher viscosity and a rich and caring sensory profile, loaded with a combination of conditioning agents and emollients. It improves detangling and feel of the wet and dry hair as well as it adds smoothness and shine without heaviness.

### Application:

After washing the hair, add a generous amount of conditioner to the lengths and tips, where the care is needed the most. Leave for a few minutes before rinsing with warm water. Intensify the caring effect by a longer application time.

### HINTS ON CHALLENGES AND TECHNOLOGY

- With a natural compliant combination of conditioning agents
- Well stabilized emulsion containing cationic and active ingredients
- Sensory profile comparable to conventional product
- Easy to apply, to distribute and to rinse despite high viscosity
- Natural compliant antimicrobial product protection system

# TRENDS AND MARKETING OPPORTUNITIES

### **TANGIBLE PERFORMANCE**

Convince the user during the first application

### THE CONSCIOUS CONSUMERS

Are selective about the composition of their hair care

### **CARING COMBO**

Match with the shampoo

\* See page 6 and 7

### NATURAL PRE-WASH HAIR MASK L105-2.19-0120

Claims: Conditioning and nourishing mask for application prior to shampooing

Water free, self-emulsifying formulation for easier washing out

Natural content c<sub>a</sub>: 80.9%, Natural origin content c<sub>a</sub>: 100% (incl. water, ISO 16128)

Phase	Ingredient	INCI (EU)	Supplier	%
A	dermofeel® viscolid MB	Hydrogenated Vegetable Oil	Evonik	7.00
	ISOLAN° GPS	Polyglyceryl-4 Diisostearate/ Polyhydroxystearate/Sebacate	Evonik	2.50
	dermofeel® sensolv MB	Isoamyl Laurate	Evonik	2.50
	Almond Oil, refined, Ph. Eur.	Prunus Amygdalus Dulcis Oil	Gustav Heess	2.00
	Castor Oil, cold pressed, organic	Ricinus Communis Seed Oil	Gustav Heess	61.30
	Sheabutter, refined, organic	Butyrospermum Parkii Butter	Henry Lamotte	5.00
	Cocoa Butter, pellets, organic	Theobroma Cacao Seed Butter	Henry Lamotte	5.00
	Coconut Oil, pressed, organic	Cocos Nucifera Oil	Henry Lamotte	5.00
	dermofeel® P-30 MB	PCA Glyceryl Oleate	Evonik	2.00
	TEGOSOFT° PC 41 MB	Polyglyceryl-4 Caprate	Evonik	4.00
	dermosoft® GMCY MB	Glyceryl Caprylate	Evonik	1.00
	TEGO® Feel C 10	Cellulose	Evonik	2.00
	dermofeel® Toco 70 non GMO	Tocopherol; Helianthus Annuus Seed Oil	Evonik	0.20
Z	Perfume	Parfum	diverse	0.50

100.00

### Processing:

- 1. Mix all ingredients of phase A one after the other and heat up to 70 °C under stirring until everything is melted.
- 2. Add phase Z and stir with care.
- 3. Start to cool down under stirring and homogenize at approx. 35 °C (turbidity should be obtained).
- 4. Fill immediately into final containers and leave the gel untouched.

#### Specification:

Appearance: Light yellowish paste

Stability test: passed

### 2. HAIR CARE



### THE FORMULATION AND ITS APPLICATION

This treatment is an additional care option for dry and brittle hair tips and lengths. The water-free balm is convenient to use and effective. The oils cover the hair shaft and are partly washed off by the shampoo, but instead of the natural lipid layer of the hair.

### Application:

Apply on dry hair before bedtime with a focus on parts where the extra care is needed. Leave in overnight. In the morning, rinse off in the shower and wash hair with shampoo. The balm emulsifies in contact with water to facilitate the rinsing. Shampooing is necessary to remove excess oil and not to weigh down the hair.

### HINTS ON CHALLENGES AND TECHNOLOGY

- Soft, well-manageable and well-stabilized oil gel
- Oil gel includes conditioning agents
- · Self-emulsifying formulation thanks to incorporation of surfactants
- · Protection from spoilage suited for water-free and high oil content formulation

### TRENDS AND MARKETING **OPPORTUNITIES**

### **OVERNIGHT BEAUTY & TIME SAVING**

Let the sleeping hours do the work

### **VERSATILITY**

No time before bed for application? Apply immediately before washing

### **BACK TO NATURE**

Vegetable oils as the most traditional form of hair care – now in a spill-free format

\* See page 6 and 7

17

### NATURAL MICELLAR SCALP ELIXIR L105-6.31-0120

Claims: Scalp treatment fluid for all hair/scalp types

Rebalances the scalp and moisturizes the skin

Natural content c<sub>n</sub>: 88.7%, Natural origin content c<sub>n</sub>: 99.6% (incl. water, ISO 16128)

Phase	Ingredient	INCI (EU)	Supplier	%
Α	TEGO° Solve 90 MB	Polyglyceryl-6 Caprylate; Polyglyceryl-4 Caprate	Evonik	2.00
	RHEANCE® One	Glycolipids	Evonik	2.00
	SPHINGONY®	Sphinganine	Evonik	0.10
В	Verstatil® TBG MB	Triethyl Citrate; Glyceryl Caprylate; Benzoic Acid	Evonik	2.00
С	Glycerin 99.5 %, Ph. Eur.	Glycerin	Cremer Oleo	3.00
	TEGO® Natural Betaine	Betaine	Evonik	4.00
	Deionised Water	Aqua		86.30
	Trisodium Citrate Dihydrate	Sodium Citrate	Jungbunzlauer	0.50
D	Sodium Hydroxide (sol. 10%)	Aqua; Sodium Hydroxide	diverse	0.10

100.00

### Processing:

- 1. Presolve phase A and heating up to 80 °C.
- 2. Add phase B to phase A.
- 3. Add phase C to premixed phase A/B.
- 4. Adjust the pH-value with phase D.

### Specification:

Appearance: Slightly opaque solution

pH-value: 5.6 - 5.8

Stability test: passed

Microbiological safety: challenge test passed

### 3. SCALP CARE



### THE FORMULATION AND ITS APPLICATION

More consumers realize: healthy hair begins at the scalp. A refreshing tonic can help to increase the wellbeing of this part of the skin. The clear liquid has a pleasant and soothing skin feel. The oil-free formulation contains different actives which nourish the skin and improve the hair quality. Not only the scalp, but also the hair will benefit from this elixir.

### Application:

A pipette dispenser enhances the application directly on the scalp on either dry or damp hair. Parting the hair in small sections will help to distribute evenly over the entire scalp. Gently massage the tonic into the scalp. Do not rinse and style hair as usual.

### HINTS ON CHALLENGES AND TECHNOLOGY

- · Clear, non-sticky solution without alcohol
- Incorporation of different types of active ingredients
- Mild composition with fully natural based ingredients
- Natural Origin Index = 99.6%

### **TRENDS AND MARKETING OPPORTUNITIES**

### **HOLISTIC BEAUTY**

Comprehensive approach to improve hair health and prevent hair aging

### **SCALP PROTECTION**

From pollution and restoration after washing

### MINIMALISM

Maximum effect with low number of ingredients

\* See page 6 and 7

### NATURAL DEFINITION STYLING WAX L105-7.20-1219

Accentuates the hair and enhances volume and texture

Natural styling agents and vegetable oils keep the hair soft and flexible

Natural content c<sub>n</sub>: 59.3%, Natural origin content c<sub>n</sub>: 100% (incl. water, ISO 16128)

Phase	Ingredient	INCI (EU)	Supplier	%
A	dermofeel® viscolid MB	Hydrogenated Vegetable Oil	Evonik	5.00
	Sunflower Oil, pressed, organic	Helianthus Annuus Seed Oil	Henry Lamotte	9.25
	dermofeel® sensolv MB	Isoamyl Laurate	Evonik	7.00
	Castor Oil, refined	Ricinus Communis Seed Oil	Henry Lamotte	21.00
	Kahlwax 8104	Cera Alba	KahlWax	5.00
	TEGO® Alkanol 1618 MB	Cetearyl Alcohol	Evonik	6.00
	TEGIN® M Pellets MB	Glyceryl Stearate	Evonik	5.00
	Sheabutter, refined	Butyrospermum Parkii Butter	Henry Lamotte	2.00
	Coconut Oil, refined, organic	Cocos Nucifera Oil	Henry Lamotte	6.50
	Spherilex® 10 PC	Hydrated Silica	Evonik	1.00
	TEGO° Feel C 10	Cellulose	Evonik	9.00
	Sorbitol PO 070_Beauté by Roquette PO 070	Sorbitol; Aqua	Roquette	15.00
	dermofeel® Toco 70 non GMO	Tocopherol; Helianthus Annuus Seed Oil	Evonik	0.50
	dermosoft® GMCY MB	Glyceryl Caprylate	Evonik	1.00
В	Acacia honey organic	Mel	Cum Natura	6.00
Z	Perfume	Parfum	diverse	0.75

100.00

### Processing:

- 1. Mix ingredients of phase A one after the other and heat up to 80 °C under medium stirring until a clear solution is obtained.
- 2. Start to cool down under medium stirring.
- 3. Add phase B and phase Z below 50 °C.
- 4. Homogenize at approx. 40 °C (turbidity should be observed).
- 5. Fill immediately into final containers and leave the gel untouched.

### Specification:

Appearance: Light yellow, high viscous wax

Stability test: passed

### 4. HAIR STYLING



### THE FORMULATION AND ITS APPLICATION

Whether the goal is to get control over straying curls and frizz or to add hold to the hair style, this wax is the ideal option for a natural look. The texture of the wax is comparably soft, so easy pick up is possible. It will slightly melt upon contact with the warm skin. The hairstyle will be kept in place but remains flexible, with a well-cared and mattified look.

### Application:

Pick up a small amount of product with the fingertips. Rub between the hands until slightly melted. Work carefully into the hair and style as desired. Start off with a small amount of product and add more if necessary.

### HINTS ON CHALLENGES AND TECHNOLOGY

- Oil- and wax-based, water-free product with soft texture for easy pick up
- · Properties balanced between handling convenience, hold in the hair and stickiness
- Sensory on the hair: supple to touch with healthy shine, but non-greasy

### TRENDS AND MARKETING **OPPORTUNITIES**

### **FLEXIBLE ME**

Enables re-styling, according to mood and occasion

### **MADE FOR EVERYONE**

For all hair lengths and -types and for beard styling

### NATURAL LOOK & FEEL

"No make-up" trend transferred to hair styling

\* See page 6 and 7

### NATURAL SHAVING STICK L105-1.12-0919

Claims: Application onto wet skin creates a smooth and fine foam

With moisturizing and refatting ingredients

Natural content c<sub>a</sub>: 36%, Natural origin content c<sub>a</sub>: 100% (incl. water, ISO 16128)

Phase	Ingredient	INCI (EU)	Supplier	%
A	Radianol 4710	Propylene Glycol	Oleon	23.00
	PALMSTAR NAV	Sodium Stearate	Peter Greven	9.00
В	Deionised Water	Aqua	-	3.00
	Potassium Hydroxide, pure	Potassium Hydroxide	diverse	3.10
	Glycerin 99.5%, Ph. Eur.	Glycerin	Cremer Oleo	5.00
	Sodium Hydroxide (sol. 30%)	Aqua; Sodium Hydroxide	diverse	0.20
С	Sulfopon 1216 G MB	Sodium Coco-Sulfate	BASF	25.00
	dermosoft® Pentiol eco	Pentylene Glycol	Evonik	3.00
	TEGO® Remo 95 MB	Sorbitan Caprylate; Glyceryl Oleate	Evonik	2.00
D	Deionised Water	Aqua	-	7.85
	dermofeel® PA-12	Sodium Phytate	Evonik	0.10
	TEGO® Natural Betaine	Betaine	Evonik	2.00
E	Palmera A 9914	Myristic Acid	KLK Oleo	8.00
	Palmera A1601	Palmitic Acid	KLK Oleo	6.00
	Coconut Oil, refined, organic	Cocos Nucifera Oil	Henry Lamotte	2.00
Z	Perfume	Parfum	diverse	0.75

100.00

### Processing:

- 1. Heat phase A up to 80 °C and dissolve Sodium Stearate in little portions while stirring.
- 2. Dissolve Potassium Hydroxide in water and add the rest of phase B.
- 3. Premix phase C and let it swell. Heat up to 60 -70 °C.
- 4. Heat phase E up to 75 °C.
- 5. Add phase B to phase A while stirring. Then add phase C to phase A/B.
- $6. \ Add\ phase\ D\ to\ phase\ A/B/C\ under\ stirring.\ Sodium\ Coco-Sulfate\ has\ to\ be\ dissolved,\ if\ not\ homogenize\ with\ an\ Ultra\ Turrax.$
- 7. Add phase E to phase A/B/C/D while stirring. Pay attention to the foam building rate.
- 8. Add phase Z.
- 9. Cool down to 60-65 °C and fill into the final containers.

### Specification:

Appearance: Opaque, solid stick

Stability test: passed

Microbiological safety: challenge test passed

### **5. SHAVING**



### THE FORMULATION AND ITS APPLICATION

Grooming and shaving the hair of the face and body is part of the regular routine for many people. Our Natural Shaving Stick provides a fine-pored and creamy foam that supports a shaving procedure that is gentle to the skin. The stick format is convenient and compact and therefore ideal for travelling.

### Application:

Spread the stick several times over the wet skin until a fine foam is formed. If needed, use hands to distribute the foam evenly and to increase the lather. Alternatively, use a shaving brush to create foam. Shave as usual and rinse afterwards.

### HINTS ON CHALLENGES AND TECHNOLOGY

- Well stabilized and easy-to-process soap base
- Foam texture ideal to support the shave
- Higher pH will soften the hair and improve the shaving result
- · Moisturizing and refatting effect for the skin

# TRENDS AND MARKETING OPPORTUNITIES

### **GENDER-NEUTRAL**

Shaving is for everyone

### TRAVEL-FRIENDLY

No leak, no spill, no aerosol

### **SUSTAINABILITY CONSCIOUS**

Low water content

Long lasting product with

targeted application

\* See page 6 and 7



#### **Certification Status:**

The information and data given is based on available certifier information. We are not obliged to give confirmations on behalf of any certifiers. Regulations for approval and use can be changed from certifiers. Certifications will be submitted for prolongation periodically. For updated information please contact your certifier.

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 of incoming goods.

Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer.

The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit written authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model, design or other intellectual property right.

#### Disclaimer:

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes.

In no event shall Evonik Dr. Straetmans assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. Evonik Dr. Straetmans expressly disclaims any representations and warranties of any kind, whether express or implied, as to the accuracy, completeness, non-infringement, merchantability and/or fitness for a particular purpose (even if Evonik Dr. Straetmans is aware of such purpose) with respect to any information and recommendations provided. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used.

Evonik Dr. Straetmans reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

### dr.straetmans® 0



### Evonik Dr. Straetmans GmbH

Merkurring 90 D-22143 Hamburg, Germany T +49 (0)40-66 93 56-0 F +49 (0)40-66 93 56-310 info-drs@evonik.com www.dr-straetmans.de