

Selco^o

delivery program





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Company Profile

Foundation:	1997 by Mrs. Michèle Wilker and Mr. Bodo Wilker
Location:	together with GfN in Wald-Michelbach / Odenwald, close to Heidelberg / Germany
Basis product line:	special plant extracts, trading of special multiactive products
DIN ISO 9001:	February 2004
Distribution:	worldwide

Our Selco Team

Selco, Wirkstoffe Vertriebs GmbH
Straßburg 16
69483 Wald-Michelbach / Germany

Phone: +49 (0)6207 92 28-0
FAX: +49 (0)6207 92 28-10
Web-Site: www.gfn-selco.de

Name	Function	Phone	eMail
Mr. Bodo Wilker	Directing Manager	+49 (0)6207 92 28-0	m.wilker@gfn-selco.de
Mrs. Sigrid Baier	Assistant Directing Manager	+49 (0)6207 92 28-14	s.baier@gfn-selco.de
Mrs. Anja Sauer	Purchasing	+49 (0)6207 92 28-21	a.sauer@gfn-selco.de
Mrs. Waltraud Kreidt	Manager Order Processing	+49 (0)6207 92 28-25	w.kreidt@gfn-selco.de
Mrs. Sonya Reinhard	Order Processing	+49 (0)6207 92 28-15	s.reinhard@gfn-selco.de
Mr. Claas Klingebiel	Sales Assistant	+49 (0)6207 92 28-29	c.klingebiel@gfn-selco.de
Mr. Riekus Brehm	Production / Quality System	+49 (0)6207 92 28-28	r.brehm@gfn-selco.de
Mrs. Silvia Essinger	QM-System	+49 (0)6207 92 28-0	s.essinger@gfn-selco.de
Home-Office			
Mrs. Dr. Karen Mörs An der Blumenwiese 21 45141 Essen	Sales Manager	+49 (0)201 8 77 67 00	k.moers@gfn-selco.de
Mrs. Brigitte aus dem Siepen Kohlstr. 198 42109 Wuppertal	Sales Manager	+49 (0)202 7 05 29 98	aus.dem.siepen@gfn-selco.de

range of Selco products and their use in alphabetical order			Hydration, Moisturizer	Skin Protection, Radical Scavenger	Metabolic Activator, Energizer	Skin Smoothing	Improvement o Skin Feel	Thickener, Rheological Additive	Hair Care, Body Wash	Sun Protection, After Sun	Deodorants	Decorative Cosmetics	Anti-Acne Products	Skin Whitening
Product	INCI	Mat.-Co.	1	2	3	4	5	6	7	8	9	10	11	12
18-β- Glycyrrhetic Acid	Glycyrrhetic Acid	6030		●						●			●	
Aloe Vera freeze dried gel powder 200:1	Aloe Barbadensis	7100	●	●		●	●	●		●				
Aloe Vera gel juice concentrate 10:1 (preserved)	Aloe Barbadensis	7155	●	●		●				●				
Aloe Vera gel juice concentrate 10:1 (unpreserved)	Aloe Barbadensis	7101	●	●		●				●				
Aloe Vera spray dried gel powder 200:1	Aloe Barbadensis	7157	●	●		●	●	●		●				
Ammonium Glycyrrhizinate	Ammonium Glycyrrhizate	6033		●						●			●	
Arbutin	Arbutin	7011												●
Biotin USP 24	Biotin	7001				●			●					
alpha-Bisabolol, natural *	Bisabolol	6044		●						●	●		●	
Coenzyme Q10, Ubiquinone	Ubiquinone	6034		●		●								
Dipotassium Glycyrrhizinate	Dipotassium Glycyrrhizate	6035		●						●	●		●	
Dipotassium Glycyrrhizinate (China)	Dipotassium Glycyrrhizate	7196		●						●	●		●	
Elder Flower Extract	Aqua (Water), Alcohol Denat., Phenethyl Alcohol, Sambucus Nigra (Sambucus Nigra Flower Extract)	7004		●	●					●	●		●	

range of Selco products and their use in alphabetical order			Hydration, Moisturizer	Skin Protection, Radical Scavenger	Metabolic Activator, Energizer	Skin Smoothing	Improvement o Skin Feel	Thickener, Rheological Additive	Hair Care, Body Wash	Sun Protection, After Sun	Deodorants	Decorative Cosmetics	Anti-Acne Products	Skin Whitening
Product	INCI	Mat.-Co.	1	2	3	4	5	6	7	8	9	10	11	12
Magnesium Ascorbyl Phosphate	Magnesium Ascorbyl Phosphate	6047		●	●									●
Pansy Extract	Aqua (Water), Alcohol Denat., Phenethyl Alcohol, Viola Tricolor (Viola Tricolor Extract)	7005		●							●		●	
Phytosterol Complex	Glycine Soja Sterol (Soybean Sterol)	7052		●						●			●	
Rutin DAB	Rutin	7177		●		●			●	●				
Stearyl Glycyrrhetinate	Stearyl Glycyrrhetinate	6036		●						●			●	
Tannic Acid, powder pure	Tannic Acid	7053		●							●		●	
Ursolic Acid Na-Salt	Sodium Ursolate, Sodium Oleanolate	7056		●	●	●				●		●		

* / ** = not available in every country

Alphabetical Index of Selco products

Product	INCI	Appearance	Soluble in	Use	Benefits
18-β-Glycyrrhetic Acid	Glycyrrhetic Acid	Fine white to off-white powder with a typical odor	Soluble in hot water, in Phenethyl Alcohol and in Alcohol up to 0.6 %	0.5 - 1.0 %	<ul style="list-style-type: none"> • Triterpenic Acid from Liquorice • Antiphlogistic • Sebum control • Acceleration of wound healing • Anti-itching effects • Antioxidant
Aloe Vera freeze dried gel powder 200:1	Aloe Barbadensis	White to pale yellow powder with a typical odor, content Polysaccharides min. 12 %	Soluble in Water	0.02 - 0.5 %	<ul style="list-style-type: none"> • IASC certificated Aloe Vera quality • Excellent moisturizer • Anti-inflammatory • Skin smoothing • Improves elasticity of skin
Aloe Vera gel juice concentrate 10:1 (preserved)	Aloe Barbadensis	Uncolored juice with a typical odor, content Polysaccharides min. 0.6 %	Soluble in Water	0.5 - 5.0 %	<ul style="list-style-type: none"> • IASC certificated Aloe Vera quality • Excellent moisturizer • Anti-inflammatory • Skin smoothing • Improves elasticity of skin
Aloe Vera gel juice concentrate 10:1 (unpreserved)	Aloe Barbadensis	Uncolored juice with a typical odor, content Polysaccharides min. 0.6 %	Soluble in Water	0.5 - 5.0 %	<ul style="list-style-type: none"> • IASC certificated Aloe Vera quality • Excellent moisturizer • Anti-inflammatory • Skin smoothing • Improves elasticity of skin
Aloe Vera spray dried gel powder 200:1	Aloe Barbadensis	White to pale yellow powder with a typical odor, content Polysaccharides min. 12 %	Soluble in Water	0.02 - 0.5 %	<ul style="list-style-type: none"> • IASC certificated Aloe Vera quality • Excellent moisturizer • Anti-inflammatory • Skin smoothing • Improves elasticity of skin
Ammonium Glycyrrhizinate	Ammonium Glycyrrhizate	White to cream-white powder with a typical odor	Soluble in Water	0.2 - 2.0 %	<ul style="list-style-type: none"> • Extract from Liquorice • Antiphlogistic • Controls sebum • Supports Emulsifiers • sweetish component in dental products and in food industry
Arbutin	Arbutin	White to creamy powder, with a slight odor	Soluble in water, slightly soluble in Ethanol	1.0 - 5.0 %	<ul style="list-style-type: none"> • Skin whitening • Depigmentation of skin • Protection against damages caused by UV-light • Antioxidant • Antimicrobial effects
Biotin USP 24	Biotin	White, crystalline powder with a typical odor	Soluble in Water and Glycerin up to 0.06% (heat up to 50°C)	0.003 - 0.01 %	<ul style="list-style-type: none"> • Component of many Enzymes in our body • Vitamin H • Smoothing the skin • Strengthen the hair

Product	INCI	Appearance	Soluble in	Use	Benefits
alpha-Bisabolol, natural	Bisabolol	Clear to yellowish oily liquid, with a slight odor	Soluble in oils	0.1 - 0.5 %	<ul style="list-style-type: none"> • Soothing the skin • Anti-inflammatory • Works against germs and works anti-mycotic
Coenzyme Q10, Ubiquinone	Ubiquinone	Yellow to orange powder with no odor	Soluble in Paraffin Oil	0.01 - 0.10 %	<ul style="list-style-type: none"> • Radical Scavenger • Antioxidant • Smoothing the skin
Dipotassium Glycyrrhizinate	Dipotassium Glycyrrhizate	White to cream-white powder with a typical odor	Soluble in Water	0.2 - 2.0 %	<ul style="list-style-type: none"> • Product from Liquorice • Antiphlogistic • Controls sebum • Surface active
Elder Flower Extract	Aqua, Alcohol Denat., Phenethyl Alcohol, Sambucus Nigra (Water Alcohol Denat., Phenethyl Alcohol, Sambucus Nigra Flower Extract)	Clear to amber liquid with a typical odor	Soluble in Water	1.0 - 5.0 %	<ul style="list-style-type: none"> • Extract from Elder Flowers • Contains Bioflavones and natural Tannic Acid • Enhances blood circulation • Works against oxygen radicals • Stabilizes Membranes • Anti-inflammatory • Works against bacterias
Magnesium Ascorbyl Phosphate	Magnesium Ascorbyl Phosphate	White to off-white powder with a typical odor	Soluble in Water	0.5 -3.0 %	<ul style="list-style-type: none"> • Water soluble, stable Vitamin C derivative • Skin Whitening • Very strong Antioxidant • Strong radical scavenger • Optimal usable for Anti-Aging products • Stimulates Production of Collagen
Pansy Extract	Aqua, Alcohol Denat., Phenethyl Alcohol, Viola Tricolor (Water, Alcohol Denat., Phenethyl Alcohol, Viola Tricolor Extract)	Clear to amber liquid with a typical odor	Soluble in Water, add some Solubilizers to improve stability	2.0 - 5.0 %	<ul style="list-style-type: none"> • Ingredients (Bioflavon and Tannic Acid) are standardized • Antioxidant • Works against bacterias, especially against gram positive germs and skin fungi • Anti-inflammatory and slightly keratoplastic • Controls sebum • Anti-Acne Products
Phytosterol Complex	<i>Glycin Soja Sterols Soybean Sterols (in registration)</i>	Cream flakes with a typical odor	Soluble in nonpolar oils and fatty alcohols	0.1 - 1.0 % 1.0 - 2.0 % in Dermal products	<ul style="list-style-type: none"> • Contains β-Sitosterin • Anti-itching effects • Antiphlogistic • Against edema • Improves stability of emulsions
Rutin DAB	Rutin	Yellow, crystalline powder with no odor	Soluble in Alcohol/ Water mixtures and Phenethyl Alcohol	0.001 - 0.05 %	<ul style="list-style-type: none"> • Bioflavon • Very strong Antioxidant • Works very effective against Oxygen radicals • Anti-inflammatory • Stabilizes membranes • Anti-dandruff

Product	INCI	Appearance	Soluble in	Use	Benefits
Stearyl Glycyrrhetinate	Stearyl Glycyrrhetinate	Fine white to cream-white, crystalline powder	Oil soluble	0.05 - 0.5 %	<ul style="list-style-type: none"> • Triterpenoic Acid from Liquorice • Stearylester of 18-β Glycyrrhetic Acid • Antiphlogistic • Sebum control
Tannic Acid, powdered pure, Ph EUR, US	Tannic Acid	Slightly brownish powder with no odor	Soluble in Water (up to 25%) and in Alcohol	0.05 – 0.3 %	<ul style="list-style-type: none"> • Active ingredient out of Chinese Gall Nuts • Very strong Antioxidant • Astringent • Anti-inflammatory • Reduction of Sensitivity • Works against bacterias
Ursolic Acid Na-Salt	Sodium Ursolate, Sodium Oleanolate	White, crystalline powder, odorless	Soluble in Alcohol, in Alcohol / Water mixtures and in Phenethyl Alcohol, Predispersion in Oil possible	0.1 – 0.5 %	<ul style="list-style-type: none"> • Triterpenoic Acid from an Australian Plant • Contains about 85% Ursolic Acid and about 15% Oleanolic Acid • Anti-inflammatory • Anti-Photoaging • Inhibits Elastase • Stabilizes liposome Membranes • Repair-Effects

1. 18-β-Glycyrrhetic Acid

Description and Efficacy:

18-β Glycyrrhetic Acid is obtained by hydrolysis of Glycyrrhinate extracted from the roots of Liquorice (*Glycyrrhiza glabra*).

The most important active ingredients of Liquorice are Saponins of triterpens with a concentration of 5 – 15 %.

Due to its structure 18-β Glycyrrhetic Acid has a multiactive effect, when applied orally or topically. This effect continues for a long time after the application of the formulation with 18-β Glycyrrhetic Acid has stopped. The multifunctionality of this active ingredient makes it so interesting for a number of Cosmetic formulations.

The products corresponds to European Pharmacopoeia IV Ed.01/2002/1511.

INCI: Glycyrrhetic Acid

Appearance:

Fine white to off-white powder with a typical odor

Technical data:

Glycyrrhetic Acid (dry basis)	98.0 – 101.0 %
Glycyrrhetic Acid HPLC	mind. 98 %
Specific optical rotation	+ 145° to + 154°
Loss on drying	< 0.5 % w/w
Sulphated Ash	< 0.2 % w/w
Heavy metals	< 20 ppm
Residual solvents (GC)	Ethanol < 0.5 %
Pesticides / raw material according to Ph. Eur. IV ed.	
Microbiology	< 1000 CFU / g

Effects: - Antiphlogistic
 - Improvement of wound healing
 - Anti-itching
 - Bacteriostatic
 - Antioxidative

Dosage: - Skin care products 0.5 – 1.0 %
 - Lotions, after sun products 0.5 – 1.0 %
 - Dermatological preparations 0.5 – 1.0 %
 - Dental care 0.5 – 1.0 %

2. Aloe Vera freeze dried gel powder 200:1

Description and Efficacy:

Aloe Vera freeze dried gel powder 200:1 is obtained by a gentle drying process and is conforming to the fresh Aloe Vera Gel in a dilution with water (1:199).

Aloe Vera is a wonderful moisturizer; it reduces inflammation and is able to improve the wound healing process by certain active ingredients.

A common theme running through much recent research is the immunomodulatory properties of the gel polysaccharides, especially the acetylated mannans from Aloe Vera. There have also been, however, persistent reports of active glycoprotein fractions from Aloe Vera. Reports also describe antidiabetic, anticancer and antibiotic activities.

Aloe Vera is known to contain several pharmacologically active ingredients, including a carboxypeptidase that inactivates bradykinin in vitro, salicylates, and a substance that inhibits thromboxane formation in vivo. Scientific studies exist that support an antibacterial and antifungal effect for substances in Aloe Vera.

INCI: Aloe Barbadensis

Appearance:

White to pale yellow powder with a typical odor

Technical data:

Content Polysaccharides	✧ 12 g / 100 g
Content Aloin	● 0.8 mg / 100g
Absorbance (0.5%, 400 nm)	● 0.10
pH (0.5 % solution)	3.5 – 4.7
Moisture	● 5 %
Total bacterial count	● 100 CFU / g
Pathogenic bacterium	negative

Effects:

- Excellent moisturizer
- Anti-inflammatory
- Improvement of wound healing
- Skin Smoothing
- Improves elasticity of the skin

Dosage:

- Skin care products 0.02 – 0.5 %
- Lotions, after sun products 0.02 – 0.5 %
- Dermatological preparations 0.02 – 0.5 %

3. Aloe Vera gel juice concentrate 10:1 (preserved)

Description and Efficacy:

Aloe Vera gel juice concentrate 10:1 conforms to the fresh Aloe Vera Gel in a dilution with water (1:9).

Aloe Vera is a wonderful moisturizer; it reduces inflammation and is able to improve the wound healing process by certain active ingredients.

A common theme running through much recent research is the immunomodulatory properties of the gel polysaccharides, especially the acetylated mannans from Aloe Vera. There have also been, however, persistent reports of active glycoprotein fractions from Aloe Vera. Reports also describe antidiabetic, anticancer and antibiotic activities.

Aloe Vera is known to contain several pharmacologically active ingredients, including a carboxypeptidase that inactivates bradykinin in vitro, salicylates, and a substance that inhibits thromboxane formation in vivo. Scientific studies exist that support an antibacterial and antifungal effect for substances in Aloe Vera.

INCI: Aloe Barbadensis

Appearance:

Uncolored juice with a typical odor

Technical data:

Content Polysaccharides	✧ 0.6 g / 100 g
Content Aloin	● 50 mg / 100g
pH (0.5 % solution)	3.5 – 4.7
Total solid	✧ 4.60 %
Moisture	● 5 %
Total bacterial count	● 100 CFU / g
Pathogenic bacterium	negative

Effects:

- Excellent moisturizer
- Anti-inflammatory
- Improvement of wound healing
- Skin Smoothing
- Improves elasticity of the skin

Dosage:

- Skin care products 0.5 – 5.0 %
- Lotions, after sun products 0.5 – 5.0 %
- Dermatological preparations 0.5 – 5.0 %

4. Aloe Vera gel juice concentrate 10:1 (unpreserved)

Description and Efficacy:

Aloe Vera gel juice concentrate 10:1 conforms to the fresh Aloe Vera Gel in a dilution with water (1:9).

Aloe Vera is a wonderful moisturizer; it reduces inflammation and is able to improve the wound healing process by certain active ingredients.

A common theme running through much recent research is the immunomodulatory properties of the gel polysaccharides, especially the acetylated mannans from Aloe Vera. There have also been, however, persistent reports of active glycoprotein fractions from Aloe Vera. Reports also describe antidiabetic, anticancer and antibiotic activities.

Aloe Vera is known to contain several pharmacologically active ingredients, including a carboxypeptidase that inactivates bradykinin in vitro, salicylates, and a substance that inhibits thromboxane formation in vivo. Scientific studies exist that support an antibacterial and antifungal effect for substances in Aloe Vera.

INCI: Aloe Barbadensis

Appearance:

Uncolored juice with a typical odor

Technical data:

Content Polysaccharides	✧ 0.6 g / 100 g
Content Aloin	● 50 mg / 100g
pH (0.5 % solution)	3.5 – 4.7
Total solid	✧ 4.60 %
Moisture	● 5 %
Total bacterial count	● 100 CFU / g
Pathogenic bacterium	negative

Effects:

- Excellent moisturizer
- Anti-inflammatory
- Improvement of wound healing
- Skin Smoothing
- Improves elasticity of the skin

Dosage:

- Skin care products 0.5 – 5.0 %
- Lotions, after sun products 0.5 – 5.0 %
- Dermatological preparations 0.5 – 5.0 %

5. Aloe Vera spray dried gel powder 200:1

Description and Efficacy:

Aloe Vera spray dried gel powder 200:1 is obtained by a drying process and is conforming to the fresh Aloe Vera Gel in a dilution with water (1:199).

Aloe Vera is a wonderful moisturizer; it reduces inflammation and is able to improve the wound healing process by certain active ingredients.

A common theme running through much recent research is the immunomodulatory properties of the gel polysaccharides, especially the acetylated mannans from Aloe Vera. There have also been, however, persistent reports of active glycoprotein fractions from Aloe Vera. Reports also describe antidiabetic, anticancer and antibiotic activities.

Aloe Vera is known to contain several pharmacologically active ingredients, including a carboxypeptidase that inactivates bradykinin in vitro, salicylates, and a substance that inhibits thromboxane formation in vivo. Scientific studies exist that support an antibacterial and antifungal effect for substances in Aloe Vera.

INCI: Aloe Barbadensis

Appearance:

White to pale yellow powder with a typical odor

Technical data:

Content Polysaccharides	✧ 12 g / 100 g
Content Aloin	● 0.8 mg / 100g
Absorbance (0.5%, 400 nm)	● 0.10
pH (0.5 % solution)	3.5 – 4.7
Moisture	● 5 %
Total bacterial count	● 100 CFU / g
Pathogenic bacterium	negative

Effects:

- Excellent moisturizer
- Anti-inflammatory
- Improvement of wound healing
- Skin Smoothing
- Improves elasticity of the skin

Dosage:

- Skin care products 0.02 – 0.5 %
- Lotions, after sun products 0.02 – 0.5 %
- Dermatological preparations 0.02 – 0.5 %

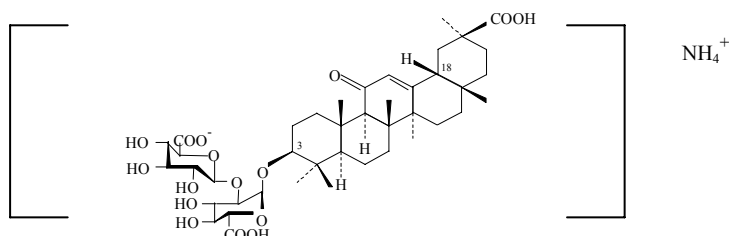
6. Ammonium Glycyrrhizinate

Description and Efficacy:

Ammonium Glycyrrhizinate is obtained from the roots of Liquorice (*Glycyrrhiza glabra*). The most important active ingredients of Liquorice are Saponins of triterpens, about 5 – 15 %.

Due to its structure Ammonium Glycyrrhizinate has a multiactive effect, when applied orally or topically. This effect continues for a long time after the application of the formulation with Mono-Ammonium Glycyrrhizinate has stopped. The multifunctionality of this active ingredient makes it so interesting for a number of Cosmetic formulations.

Chemical structure:



INCI: Ammonium Glycyrrhizate

Appearance:

White to cream powder with a typical odor

Technical data:

Assay (potentiometric titration)	98.0 – 102.0 %
Residual solvents (GC)	Ethanol < 1 %
Specific rotation	49 to 54°
Water	● 4.0 % w/w
Sulphated ash	● 0.2 % w/w
Heavy metals	< 20 ppm
Preservatives	none

Effects: - Antiphlogistic
- Controls sebum
- Enhances emulsifying processes

Dosage: - Skin care Products (Dermatological products) 0.2 – 2.0 %
- Lotions, after sun products 0.5 – 1.0 %
- After shave products 0.5 – 1.0 %
- Dental care 0.2 – 0.5 %
- Shampoo against greasy hair 0.5 – 1.0 %

7. Arbutin

Description and Efficacy:

Arbutin the glycopyranoside of hydroquinone occurs in nature e.g. in Uva-Ursi (mountain cranberry, Actostaphylos Uva-Ursi) and birch leaves (Betula spec.). Meanwhile it is also available by synthetic manufacturing process.

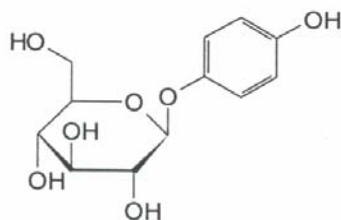
Because of the antimicrobial, anti-inflammatory and bleaching characteristics Arbutin is interesting for the use in pharmaceutical (phytotherapy) and cosmetic formulations.

INCI: Arbutin

Appearance:

White to light yellow powder, nearly odorless powder

Chemical structure:



4-hydroxyphenyl-β-D-glucopyranoside

Technical data:

assay of Arbutin (HPLC)	≥ 99.5 %
specific rotation α_D^{20} (C=3)	-64° to -66°
pH value (1% solution)	5.0 – 7.0
loss on drying	< 0.5 %
melting point	199.0 – 201.0°C
content Hydroquinone	none
heavy metals (Pb)	max. 20 ppm
Arsenic	max. 2 ppm

Effects:

- Skin lightening and skin whitening effect
- Depigmentation effect
- Prevention of photo and UV damages of the skin after sunburn
- Antimicrobial activity
- Antioxidative effect

Dosage:

- Anti-Aging products 2.0 – 3.0 %
- After sun products 2.0 – 3.0 %
- Skin Care products 1.0 – 2.0 %
- Skin lightening creams 2.0 – 5.0 %

8. Biotin USP 24

Description and Efficacy:

The Biotin USP 24 which is occurring in nature is also named Vitamin H or skin vitamin.

From the 8 stereoisomers only the D-cis-isomer (clockwise rotation of polar light) has physiological activity. Vitamin H is a member of the water-soluble B-group. It is important for nearly all organisms and therefore it is widespread in plants and animal cells. Many highly developed animals and human beings cannot produce biotin themselves.

The natural biotin is mainly functioning as a prosthetic group for enzymes. It takes part in carboxylations, which are very important for the gluconeogenesis and the synthesis of fatty acids. So far the main interest of Biotin was its use in food additives and in animal food, where it causes an increase of hair and horn growth.

INCI: Biotin

Appearance:

White, crystalline powder with a typical odor

Technical data:

Assay biotin (titration 0,1N NaOH)	97.5 – 100.5 %
Identification	Infrared absorption
Specific rotation	+89.0 to +93.0°
Loss on drying	< 0.1 %
Organic volatile impurity	meets the USP 24 requirements

Effects: Biotin USP 24 is part of many enzymes and is a Coenzyme for carboxylation which is important for the decomposition of amino acids. They also contribute to the formation of long chained fatty acids. It is meaningful for the proliferation and differentiation of all cells.

It also could be proofed that it takes part in the formation of special proteins (e.g. Serum albumin) out of amino acids. Especially by baby's skin redness, scaly skin inflammation and a disturbed production of tallow a deficiency of biotin could be observed. Lack of biotin may cause as well weak growth of hair, hair loss and fragile nails for adults.

A study conducted by the company Wella clearly demonstrated that a lotion containing 0,003% biotin caused a strengthening of the single hair, a reduction of fragile hairs and a strengthening of hair follicles when applied topically to persons with fine, very fine and fragile hair.

Dosage: - Skin care products 0.05 – 0.01 %
 - Hair care products 0.003 – 0.006 %

9. alpha-Bisabolol natural

Description and Efficacy:

Alpha-Bisabolol is a fluid, which contains at least 95 % of α -Alpha-Bisabolol, a monocyclic unsaturated sesquiterpene alcohol. It is obtained through distillation from the candeia tree.

Alpha-Bisabolol is suitable for use in cosmetic products due to its stability and good compatibility with the skin, unlike azulene or chamomile oil. Alpha-Bisabolol does not alter its color during long storage periods or diffuse through plastic containers and thus can be used without any problems.

The main areas of application for Alpha-Bisabolol are skin protective and skin-care cosmetic preparations in particular ointments, creams or lotions for sensitive skin. Alpha-Bisabolol is also suitable for sunscreen products, after sun preparations, baby care and after-shave formulations.

INCI: Bisabolol

Appearance:

Clear to straw yellow, oily liquid with a slight odor

Technical data:

Purity	> 95% 1-alpha-bisabolol
Refractive Index 20°C	1.493 – 1.497
Boiling point	265°C
Density D20°	0.925 to 0.933
Optical Rotation (alpha) 20D =	-55 - 58°
Flashpoint	112°C
Soluble in lower alcohols (ethanol, isopropanol), in fatty alcohols, glycerin esters and paraffin. Practically insoluble in water and glycerin.	

Effects: - Anti-inflammatory / bactericide
- Anti-mycotic

Dosage: - Skin care Products	0.1 – 0.5 %
- Lotions, after sun products	0.5 – 1.0 %
- dermatological preparations	0.5 – 1.0 %
- Baby and Child care products	0.5 – 1.0 %
- Mouth care, Gargle, Tooth paste	0.5 – 1.0 %

10. Coenzyme Q10, Ubiquinone

Description and Efficacy:

Coenzyme Q10 has a quinoide structure and is therefore also named as ubiquinone 50 or ubidecarenon. Coenzyme Q10 is extracted from plant cultures which contain ubidecarenon.

It is an unique scavenger because the human organism is able to produce Coenzyme Q10 by itself. It is not classified as a vitamin but is has some characters of a vitamin. It occurs in very low concentrations in nearly all organisms and is used in food and pharmaceutical industry since many years due to it's interesting activity profile.

INCI: Ubiquinone

Appearance:

Yellow to orange powder with no odor

Technical data:

Content Coenzyme Q10	min. 98.0 %
Water content	max. 0.20 %
Residue on ignition	max. 0.10 %
Heavy metals	max. 20 ppm
Related substances	max. 1 %
Melting point	50.5°C
Preservatives	none

Effects: Not all functions of Coenzyme Q10 in the biological systems are known yet. Q10 functions as an ion electron transformer between the flavoproteins and cytochromes in the respiratory chain. Its presence in Leucocytes may protect these cells against very active oxygen structures (Superoxide and Singulett-Oxygene) which normally destroy penetrated foreign bodies.

Coenzyme Q10 is also used to heal gingivitis.

Solubility:

In Paraffin liquid it is easily soluble up to 1% under stirring at about 50°C.

In Phenethyl Alcohol it is soluble up to 2 % under stirring at about 50°C.

In Ethanol it is not really soluble up to 1.0 % as fine dispersion.

Dosage: - Antioxidants 0.01 – 0.1 %
 - Antiphlogistic 0.05 %

11. Dipotassium Glycyrrhizinate

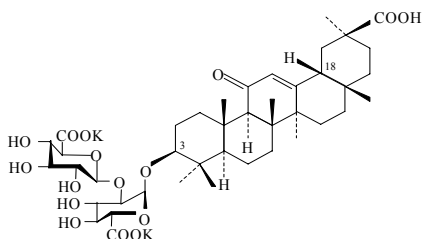
Description and Efficacy:

Dipotassium Glycyrrhizinate obtained from the roots of Liquorice (*Glycyrrhiza glabra*).

The most important active ingredients of Liquorice are Saponins of triterpens, about 5 – 15 %.

Due to its structure Dipotassium Glycyrrhizinate has a multiactive effect, when applied orally or topically. This effect continues for a long time after the application of the formulation with Dipotassium Glycyrrhizinate has stopped. The multifunctionality of this active ingredient makes it so interesting for a number of Cosmetic formulations.

Chemical structure:



INCI: Dipotassium Glycyrrhizate

Appearance:

White to cream powder with a typical odor

Technical data:

Dipotassium Glycyrrhizinate	min. 95 %
pH-value of a 1 % sol.	5.0 – 5.5
Solubility (1 : 20) in water	clear to yellowish sol.
Dry residue	max. 6.0 %
Ash	16.0 – 20.0 %
Heavy metals	< 10 ppm
Arsenic	< 2 ppm
Preservatives	none

Effects: - Antiphlogistic
- Controls sebum
- Enhances emulsifying processes

Dosage: - Skin care Products (Dermatolog. products) 0.2 – 2.0 %
- Lotions, after sun products 0.5 – 1.0 %
- After shave products 0.5 – 1.0 %
- Dental care 0.2 – 0.5 %
- Shampoo against greasy hair 0.5 – 1.0 %

12. Elder Flower Extract

Description and Efficacy:

The extract of elder flowers is manufactured by a special careful extraction process which dissolves the hydrophilic ingredients of the flowers. These are the Bioflavonoids, Isoquercitrin, Hyperosid, Quercitrin, Astralgin and of course Rutin. They are also named α -Flavonols. In addition the extract contains Tannins (e.g. derivatives of Gallic acid), derivatives of Hydroxycinnamic acid, Caffeic acid and its ester with Quinic acid. The special extract is characterized by a minimum quantity of Rutin and Tannins and demonstrates a spectrum of very interesting effects in cosmetic formulations.

INCI: Aqua, Alcohol Denat., Phenethyl Alcohol, Sambucus Nigra /
Water, Alcohol Denat., Phenethyl Alcohol, Sambucus Nigra Flower Extract

Appearance:

Clear to amber liquid with a typical odor

Technical data:

Content of water	35 – 45 %
Content of ethanol	28 – 35 %
Content of Phenethyl Alcohol	22 – 25 %
Content of tannins	min. 1.0 %
Content of bioflavonoids (α -flavonols) rutin	min 0.50 %
Dry residue	3.50 – 6.00 %
pH-value	5.00 – 6.00
Density	0.95 – 1.00 g/ml
Microbiology	< 100 CFU/ml
Preservatives	none

Effects:

- Against oxidative skin stress
- Increase of blood stream
- Stabilization of membranes
- Antiphlogistic
- Antimicrobial

Dosage:

- Skin care products 2 – 3 %
- Body lotions 1 – 2 %
- Shampoos and shower / baths 3 %
- Products for massage 3 %
- Hair care (leave-on) 1 – 2 %
- Deodorizing preparations 2 %
- Formulations for leg care 1 – 2 %

13. Magnesium Ascorbyl Phosphate

Description and Efficacy:

Magnesium Ascorbyl Phosphate is a water soluble, stable Vitamin C derivative. Magnesium L-Ascorbyl-2-phosphate contains not less than 85.0 % of magnesium L-ascorbyl-2-phosphate ($C_6H_6O_9P_3/2Mg:289.54$), calculated on the dehydrated basis.

INCI: Magnesium Ascorbyl Phosphate

Appearance:

White to off white powder with a typical odor

Technical data:

Assay	≥ 98.5 %
Specific rotation alpha D 20°C	+43° to +50°
pH value (3% solution)	7.0 – 8.5
Loss on drying	≤ 20.0 %
Apha number	≤ 70
Cl (titration)	≤ 0.35 %
Pb	< 4.0 mg/ kg
Arsenic	< 1.5 mg / kg

Effects: - Skin whitening
 - Very strong antioxidant
 - Strong radical scavenger
 - Stimulates production of Collagen

Dosage: - Skin care products 1.0 – 5.0 %
 - Hair care products 0.5 – 3.0 %
 - After sun products 0.5 – 3.0 %
 - Hand creams (aging spots) 1.0 – 5.0 %
 - Cleansing lotions 0.5 – 3.0 %

14. Pansy Extract

Description and Efficacy:

The aqueous extract of pansy (*Violae tricoloris herba*, family *Violaceae*) is mainly characterized by a minimum quantity of salicylic acid, of flavonoids mainly Rutin and of tannic acid.

The mixture of this natural agents is able to inhibit the growth of special bacteria and fungi in an excellent way. These species take part by the development of several skin diseases, skin impurities and the forming of dandruff and the decomposition of human sweat into bad smelling products.

Therefore the local application of pansy extract for the treatment of seborrhoeic skin diseases and infantile skin disease is recommended by the commission E of the German Health department.

INCI: Aqua, Alcohol Denat., Phenethyl Alcohol, Viola Tricolor /
Water Alcohol Denat., Phenethyl Alcohol, Viola Tricolor Extract

Appearance:

Clear to amber liquid with a typical odor.

Technical data:

Water content	62.00 – 72.50 %
Ethanol	14 - 18 %
Phenethyl Alcohol	10.00 %
Tannic Acid	min. 1.25 %
Salicylic acid	min. 0.50 %
Flavonoids incl. Rutin	min. 0.25 %
Rutin	min. 0.20 %
pH-value	4.00 – 4.50
Dry residue	3.50 – 8.00 %
Density at 20°C	0.95 – 1.00 g/ml
Citric acid	0.35%
Preservatives	none

Effects: - Antimicrobial, especially against gram positive bacteria and skin fungi
- Especially against athlete's foot
- Anti-inflammatory and slightly keratoplastic

Dosage:

- Rinse off-cosmetics	3.0 – 5.0 %
- Leave on Cosmetics	2.0 – 3.0 %
- Skin lotions against some skin impurities	2.0 – 3.0 %
- Antimicrobial gel against impure skin	3.0 – 4.0 %
- Shower gel against impure skin on back	4.0 – 5.0 %
- Foot deodorant with protection against athlete's foot	3.0 – 5.0 %

15. Phytosterol Complex

Description and Efficacy:

Phytosterols belong to the most important ingredients of plants because they influence their metabolism. They mainly occur in those parts of the plants, which are responsible for growth. Phytosterols have lipophilic character. As a part of human food they get into the blood circulation and are stored in the skin, but only in too small quantities which are often insufficient. They can be detected by analytical methods in the lipids of skin where they build a natural protective layer. The importance of this layer is more and more recognized as a method of skin care and skin nurse. The Phytosterol Complex was developed based on the idea to offer a natural protective agent for the intact and as well for the damaged skin. The mixture of Phytosterols is also named Sitosterin by the German commission.

INCI: Glycine Soja Sterol/ Soybean Sterol

Appearance:

White, crystalline powder with a typical odor

Technical data:

Beta-Sitosterol	47.0 – 52.0 %
Stigmasterol	20.0 – 25.0 %
Campesterol	26.0 – 31.0 %
Other Sterols	max. 2.0 %

Effects: - Skin care
 - Anti-itching
 - Antiphlogistic
 - against edema

Dosage: - Dermatological products	1.0 – 2.0 %
- After shave preparations	0.5 %
- After sun preparations	0.5 %
- Daily skin creams	0.2 %
- Care of dry skin	1.0 %
- Shampoos for damaged and dry hair	0.2 %
- Leave on hair care products for damaged and dry hair	0.1 %

16. Rutin DAB

Description and Efficacy:

Rutin DAB 10 is a glucosid composed of quercetin and rutinose (a disaccharide of glucose and rhamnose).

Rutin is one of the natural flavonoides, which is applied in the traditional medicine since centuries. It is widespread in many plants and often together with vitamin C.

INCI: Rutin

Appearance:

Yellow, crystalline powder without odor

Technical data:

Content of Rutin	98.5 – 102.0 %
Identification	acc. DAB Monography
Content of water	5.0 – 8.5 %
Residue on ignition (sulphate)	max. 0.1 %

Effects: Flavonoids are demonstrating a very good antioxidative effect in numerous tests.

- By the effect of flavonoids the speed of autoxidation of unsaturated fatty acids is reduced, demonstrated by slow formation of conjugated dimers that means less absorption at 234 nm. 10 µg of Rutin are added to 1 ml linoleic acid, no formation of diene can be observed during 15 minutes.
- Flavonoids do not only protect unsaturated fatty acids from decomposition initiated by peroxidation and the singulet oxygen (1O_2) they also prevent the oxidative decomposition of collagen by Xanthinoxidase to peptide fragments.
- The inhibition of lipogenase by rutin was also tested. The result of the special test was an inhibition of 19%. Further it could be demonstrated that the free radical of DPPH reacts with the phenolic hydrogen atoms and that the reaction mainly occurred within the polar part of the lipid membrane.

In 1999 it was concluded that some flavonoids like Rutin are excellent antioxidants by their mode of action and are able to inhibit the activity of lipoxygenase in liposomes.

Dosage: - Antioxidant 0.001 – 0.005 %
 - Antiphlogistic 0.05 %

17. Stearyl Glycyrrhetinate

Description and Efficacy:

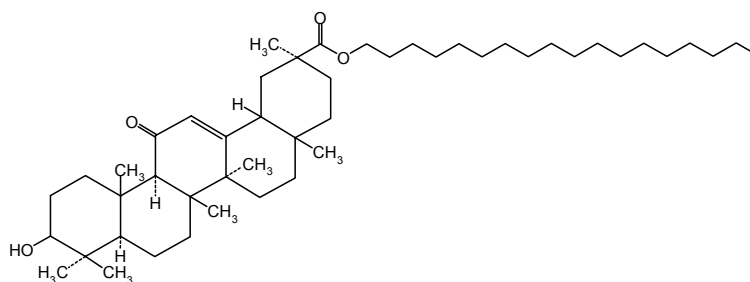
Stearyl Glycyrrhetinate is the ester of 18-β Glycyrrhetic Acid. 18-β Glycyrrhetic Acid is obtained by hydrolysis of Glycyrrhizinate extracted from the roots of Liquorice (*Glycyrrhiza glabra*).

The most important active ingredients of Liquorice are Saponins of triterpens with a concentration of 5 – 15 %.

Due to its structure 18-β Glycyrrhetic Acid has a multiactive effect, when applied orally or topically. This effect continues for a long time after the application of the formulation with 18-β Glycyrrhetic Acid has stopped. The multifunctionality of this active ingredient makes it so interesting for a number of Cosmetic formulations.

INCI: Stearyl Glycyrrhetinate

Chemical structure:



Appearance:

Fine white to cream-white, crystalline powder

Technical data:

Content	95.0 – 102.0 %
Melting point	70 – 77°C
Loss on drying	max. 1.0 %
Residue on ignition	max. 0.1 %
Heavy metals	max. 20 ppm
Arsenic	max. 2 ppm

Effects: - Antiphlogistic
- Soothing action
- Antioxidative

Dosage: - Skin care products 0.05 – 0.5 %
- Lotions, after sun products 0.05 – 0.5 %
- Dermatological preparations 0.05 – 0.5 %

18. Tannic Acid, pure pH EUR, US

Description and Efficacy:

Tannic acid pure is a natural plant product obtained out of Chinese gall nuts.

These natural gallotannic acids are working as an astringent on the epidermis and the mucous membrane of the skin.

They are also used on the purpose of being antiphlogistic, local anesthetic and a radical scavenger.

Radicals are known as one of the major cause for aging. Tannic Acid works as a radical scavenger and quencher, which exhibit special protection against radicals in the aqueous part of the tissue and the cells.

INCI: Tannic Acid

Appearance:

Slightly brownish powder with no odor

Technical data:

Content of Tannic Acid	> 90 %
Loss on drying	< 9.0 %
Sulfate ash	< 0.1 %
Heavy metals as Pb	< 0.0004 %
Arsenic	< 0.0003 %

Effects: - Antimicrobial
- Antioxidative
- Astringent
- Antiphlogistic
- Soothing

Dosage: - Skin care products 0.05 – 3.0 %

19. Ursolic Acid Na-Salt

Description and Efficacy:

The active Complex is a mixture of about 85 % Ursolic acid and 15 % Oleanolic acid which occurs in many plants.

These pentacyclic triterpenoid acids are manufactured by extraction of plants mainly of balm, rosemary leaves or Australian solanaceae. Ursolic acid and Oleanolic acid have an isomer structure.

INCI: Sodium Ursolate, Sodium Oleanolate

Appearance:

White, crystalline powder with no odor

Technical data:

Content of Ursolic Acid Na-Salt	70 - 100 %
Content of Oleanolic Acid Na-Salt	0 – 30 %
Residual solvents: Ethanol	≤ 3.0 %
Toluol	< 100 ppm
Loss on drying	≤ 3.0 %
Microbiology	< 100 CFU / g

Effects:

- Anti-photoaging
- Inhibition of elastase
- Antioxidation
- Antiphlogistic, Anti-inflammatory
- Stabilization of liposomal Membranes
- Antitumor activity
- Antimicrobial activity

Dosage:

- Skin care products	0.1 – 0.2 %
- Anti-Aging preparations	0.2 – 0.3 %
- After Sun Cosmetics	0.2 %
- Cosmetics to safe skin smoothness	0.1 – 0.2 %

Preservatives / stabilizers in our products

Mat.-No.	Product	Free of preservatives	Preserved with	INCI-Name	Percentage in %
			Stabilized with		
6030	18-β-Glycyrrhetic Acid	•	unpreserved		
			without stabilizer		
7100	Aloe Vera freeze dried gel powder 200:1	•	unpreserved		
			without stabilizer		
7155	Aloe Vera gel juice concentrate 10:1 (preserved)		different preservative systems are possible	open	open
			without stabilizer		
7155	Aloe Vera gel juice concentrate 10:1 (unpreserved)		unpreserved		
			without stabilizer		
7100	Aloe Vera spray dried gel powder 200:1	•	unpreserved		
			without stabilizer		
6033	Ammonium Glycyrrhizinate	•	unpreserved		
			without stabilizer		
7011	Arbutin	•	unpreserved		
			without stabilizer		
7001	D-(+) Biotin	•	unpreserved		
			without stabilizer		
6044	alpha-Bisabolol, natural	•	unpreserved		
			without stabilizer		
6034	Coenzyme Q10, Ubiquinone	•	unpreserved		
			without stabilizer		
6035	Dipotassium Glycyrrhizinate	•	unpreserved		
			without stabilizer		
7004	Elder Flower Extract	•	unpreserved		
			Alcohol Phenethyl Alcohol	Alcohol, denat. Phenethyl Alcohol	25 – 30 22.0

Preservatives / stabilizers in our products

Mat.-No.	Product	Free of preservatives	Preserved with	INCI-Name	Percentage in %
			Stabilized with		
6047	Magnesium Ascorbyl Phosphate	•	unpreserved		
			without stabilizer		
7005	Pansy Extract	•	unpreserved		
			Alcohol Phenethyl Alcohol	Alcohol, denat. Phenethyl Alcohol	14 - 18 10.0
7052	Phytosterol Complex	•	unpreserved		
			without stabilizer		
7177	Rutin DAB	•	unpreserved		
			without stabilizer		
6036	Stearyl Glycyrrhettinate	•	unpreserved		
			without stabilizer		
7053	Tannic Acid, pure Ph., EUR, US	•	unpreserved		
			without stabilizer		
7056	Ursolic Acid Na-Salt	•	unpreserved		
			without stabilizer		

Selco Wirkstoffe Vertriebs GmbH

Straßburg 16

69483 Wald-Michelbach / Germany

Telefon +49 (0)6207 92 28-0

Telefax +49 (0)6207 92 28-10

www.gfn-selco.de

info@gfn-selco.de