CLR · Product Overview



for fine cosmetics · since 1926

CLR PRODUCT GROUPS						AP	PLICA	τιον	l				CER	TIFICA	TION	
ANTI-AGING 4 MOISTURIZERS 9		ANTI-WRINKLE, FIRMING, SMOOTHING	SKIN REGENERATION	SKIN PROTECTION	SKIN LIGHTENING	MOISTURIZING	SOOTHING, CALMING, ANTI-STRESS	ANTI-ACNE	BARRIER MAINTENANCE AND REPAIR	HAIR CONDITIONING AND PROTECTION	ANTI-HAIR LOSS	SCALP CARE	quasi drug	CHINA COMPLIANT	٦L	SOLUBILITY
PRODUCT NAME		SMO	SKIN	SKIN	SKIN	MOIS	SOOT ANTI-	ANTI	BARR REPA	HAIR	ANTI	SCAL	QUAS	CHIN	HALAL	SOLU
AnnonaSense CLR™	13													С	Н	WS
Arnica Oil CLR	17												Q	С	Н	os
Belides™ ORG	7												Q	С	Н	WS
Calendula Oil CLR	16													С	Н	OS
Carrot Oil CLR	8												Q	С		OS
Ceramide Complex CLR™ PE-F	11												Q	С		WS
CutiBiome CLR™ 13	, 20													С	Н	OS
CutiFine CLR™	4													С		WS
CutiGuard CLR™	5													С		WS
DayMoist CLR™ 10	, 21													С		ws
Follicusan™ DP	21													С		WS
Glycoderm™ (P)	11													С		ws
Hexaplant™ Richter	17													С		WS
Hygroplex™ HHG	10												Q	С	Н	ws
JuvenEye CLR™	6													С		WS
Lactokine™ Fluid PF 7	, 15													С	Н	ws
Maricol S	11													С	Н	WS
Modukine™ 15	, 19												Q	С		WS
MPC [™] -Milk Peptide Complex	5												Q	С	Н	WS
MultiMoist CLR™ 9	, 21													С	Н	WS
PhytoDefense CLR™	14													С	Н	OS
Phytosan™ K	6												Q	С	Н	WS
ProBarrier™ CLR	7													С		wd
ProBioBalance CLR™ NP	15												Q	С		WS
ProRenew Complex CLR™ 5, 18	, 22													С	Н	WS
Repair Complex CLR™ PF	6												Q	С		WS
Sedaplant™ Richter	17													С		WS
Soluvit Richter NP	8													С		WS
St. John's Wort Oil CLR	17													С		OS
SyriCalm™ CLR (PC) 13	, 19													С	Н	WS
Vitamin F forte 19	, 22													С	Н	OS
Wheat Germ Oil CLR	8													С		OS

Alternative preservation systems are available for some products.

H: HALAL-certified (1)

Q: Can be used in Japan as a (non)-functional ingredient in Quasi DrugsC: Ingredients listed in IEIC-list (Inventory of Existing Cosmetic Ingredients in China)

Application

tested recommended

Efficient actives and concepts for cosmetics

 \mbox{CLR} – Chemisches Laboratorium Dr. Kurt Richter GmbH – develops innovative and high-quality cosmetic actives for skin and hair care.

In the early 1950s CLR began to focus on the manufacture of biologically active cosmetic ingredients. Over the past 60 years, CLR has enriched beauty and personal care with many novel actives and pioneering concepts.

Specializing in the development of biologically active products, we use state-of-the art methods and technology to ensure high-quality performance and create a stable foundation for future improvements. We constantly review our quality management system to match current requirements. Consequently we have introduced an integrated management system combining quality, environmental and social responsibility aspects in accordance with ISO 9001, ISO 14001, SA8000 and EFfCI GMP standards.

For CLR, sustainable management includes assuming social and environmental responsibility for its actions. Additionally, CLR supports the United Nations in the implementation of its Sustainable Development Goals. As an integral goal of the German federal government's 2030 climate protection program, CLR commits itself to reducing emissions which are hazardous to the climate.

It is our mission to supply the cosmetics industry with highquality actives; we have a focus on the development of new products with scientifically proven effects and innovative concepts for their use. In cooperation with our customers we actively and efficiently work out creative, tailor-made cosmetic concepts that match their specific requirements.

CutiFine CLR™

The all-in-one skin refiner

CutiFine CLR™



Application

- anti-wrinkle, firming,
- smoothing
- skin regeneration

CutiFine CLR[™] refines skin texture and complexion with soft focus. Conspicuous skin pores are a great concern for consumers, especially for those who have oily and combination skin. As skin ages, skin pores become also more pronounced, making skin pores the latest anti-aging skincare goal for consumers and skincare brands alike.

Based on a synergistic combination of extracts of *Vaccaria* segetalis (Cowherb) and Adansonia digitata (Baobab) pulp, CutiFine CLR[™] is an all-natural, safe and effective skincare active which goes to the core of the causes leading to conspicuous pores. It works on all important biological processes which lead to pore enlargement, but also reduces the color contrast of the pores with the surrounding skin, an until now largely overlooked but essential feature. CutiFine CLR[™] constitutes an all-in-one approach to reduce the conspicuousness of pores.

in vivo ⊠ skin	ex vivo	in vitro ☑	
Dosage:	3.0%		

pH range: <6.5

INCI Name:

Water, Vaccaria Segetalis (Cowherb) Extract, Adansonia Digitata (Baobab) Pulp Extract

CutiFine CLR™ is stabilized with pentylene glycol and phenylpropanol.

CutiGuard CLR™	in vivo ⊠ skin	ex vivo	in vitro ☑	



Application

- anti-wrinkle, firming, smoothing
- skin regeneration
- skin protection

Based on the extremophile red alga *Galdieria sulphuraria*, CutiGuard CLRTM constitutes a refined approach to the first signs of skin aging. It transfers the adaptivity and resilience of *Galdieria sulphuraria* to a highly effective, natural active ingredient that protects the skin in stressful environments.

Skin aging starts in the skin cells, which, during a lifetime, accumulate damage. Extrinsic and intrinsic factors add damage, leading to prolonged inflammation and cell senescence. CutiGuard CLR[™] reduces the number of senescent cells and associated inflammatory and destructive mediators which lead to visible skin aging. It thus protects skin against premature aging. CutiGuard CLR[™] also reduces wrinkles and significantly improves skin smoothness as well as the evenness of skin color – three crucial factors for a healthy and young appearance.

With its proactive and preventive approach, CutiGuard CLR™ is extremely suitable for modern aging consumers. It slows down the skin aging process and helps to avoid the development of the first signs of skin aging.

 Dosage:
 3.0%

 pH range:
 3.0–9.0

INCI Name:

Betaine, Sucrose, Hydrolyzed Rhodophyceae Extract, Water

CutiGuard CLR™ is unpreserved.

 ProRenew Complex CLR™	in vivo ex vivo in vitro ☑ skin □ ☑
ProRenew Complex CLR™ acts on essential features in the aging process of the skin, its ability to successfully adapt to a constantly changing environment and to effectively renew	Dosage: 3.0% pH range: 4.0–7.0
itself.	INCI Name:
	Lactococcus Ferment Lysate
ProRenew Complex CLR™ positively influences the speed	
and quality of epidermal growth. It has shown to effectively promote desquamation, the shedding of dead cells. ProRenew Complex CLR™ is beneficial for both the health of	ProRenew Complex CLR™ is preserved with sodium benzoate.
skin and the skin microbiota. It balances and protects the	Also available as

Application

- skin regeneration
- barrier maintenance and repair

stress.

- skin protection
- scalp care

MPC™–Milk Peptide Complex

skin microbiota and supports it in dealing with day-to-day



Application

- anti-wrinkle, firming, smoothing
- skin regeneration

MPC[™] reduces the visible signs of aging by reactivating skin cells and inducing the production of extracellular matrix molecules in the dermis, such as collagen Type I, hyaluronic acid and fibronectin. *In vivo* studies have shown that formulations with MPC[™] make the skin firmer and improve its elasticity. MPC[™] quickly and effectively reduces wrinkle depth and improves the structure of the skin.

MPCTM-Milk Peptide Complex contains a complex of activated, natural signaling growth factors derived from milk, such as TGF- β .

Dosage:	0.5%
pH range:	6.0-7.0

in vivo

⊠ skin

INCI Name: Whey Protein

MPC[™]– Milk Peptide Complex is unpreserved.

ProRenew Complex CLR™ NP,

levulinic acid/sodium levulinate.

ex vivo

stabilized with phenylpropanol and

5

in vitro

 \checkmark

	Phytosan™ K	in vivo ⊠ skin	ex vivo	in vitro ☑
	Phytosan™ K exerts a potent influence against skin aging. It activates cellular repair processes, supporting the mainte- nance of cellular integrity and energy after UV irradiation.	Dosage: pH range:	2.0–5.09 3.0–7.5	%
	Both are important factors in counteracting photoaging.		erin, Glycine	e Soja (Soybean)
	Phytosan [™] K also has potent regenerative effects, such as stimulation of collagen synthesis. This results in improved skin firmness and smoothness and a reduction of wrinkle	Seed Extra		
	depth. Phytosan™ K counteracts biological and UV-induced premature aging of the skin.	-	d with phe	noxyethanol e.
Application				
 anti-wrinkle, firming, smoothing 	Phytosan™ K contains proteins, glycoproteins and polysac- charides isolated from organic soybeans (GMO-free).			

JuvenEye CLR™
Based on a synergistic combination of extracts of <i>Hieracium</i>

pilosella and the flowers of Bellis perennis, JuvenEye CLR™ addresses the most important dermatological processes in the formation and the persistence of dark circles. It activates vital processes which allow for the breakdown of heme, which is both dark-colored and plays an important role in the etiology of dark circles. JuvenEye CLR™ also activates dermal draining through its ability to increase the production of VEGF-C. Excess fluids, electrolytes and immune cells are drained away more effectively. With JuvenEye CLR™, melanin deposition in the skin is reduced and overall skin health is improved.

In *in vivo* studies where JuvenEye CLR[™] was compared with a corresponding placebo formulation it could be seen that JuvenEye CLR™ clearly reduces the visibility of dark circles. Both the color and the surface area of dark circles were reduced significantly.

Dosage: 3.0-5.0% **pH range:** 4.5–6.5

ex vivo

in vitro

 $\overline{\mathbf{A}}$

INCI Name:

in vivo

⊠ skin

Bellis Perennis (Daisy) Flower Extract, Hieracium Pilosella (Hawkweed) Extract

JuvenEye CLR™

is preserved with sodium benzoate and sodium dehydroacetate.

Repair Complex CLR[™] PF is a biotechnological anti-aging active, obtained from a lysate of probiotic bifidobacteria, which potently protects against UV-induced damage in the skin. UV radiation leads to skin cell damage and immunosuppression, a deactivation of the local immune system in the skin.

By effectively activating anti-immunosuppressive processes on the cellular level, Repair Complex CLR™ PF increases cellular repair and potently supports the skin's endogenous protection mechanisms. Repair Complex CLR™ PF thus counteracts premature skin aging, i.e. photoaging.

in vivo ⊠ skin	ex vivo	in vitro	
I SKIII	V	V	_

Dosage: 5.0-10.0% **pH range:** 3.8–7.0

INCI Name: Bifida Ferment Lysate

Repair Complex CLR™ PF is preserved with phenoxyethanol and sodium benzoate.

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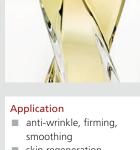
Application skin protection



Application

skin regeneration

skin lightening



skin regeneration

ANTI-AGING

skin protection

	Belides™ ORG	in vivo ex vivo in vitro ☑ skin □ ☑
Application• skin lightening	Belides [™] ORG is a natural skin-lightening agent, derived from organic daisy flowers (<i>Bellis perennis</i>). It is suitable for any skincare concept providing even and luminous com- plexion and radiant skin. Belides [™] ORG's action is based on a potent, multifaceted reduction in the activity of melanocytes. Belides [™] ORG influences different cellular pathways involved in melano- genesis, encompassing the reduction of cellular signaling, tyrosinase transcription, tyrosinase activity and melanosome transfer. These actions lead to even pigmentation and make age spots less visible.	Dosage:2.0–5.0%pH range:4.5–6.5INCI Name:Bellis Perennis (Daisy) Flower ExtractBelides™ ORGis stabilized with phenethyl alcohol.Also available asBelides™ NP,Stabilized with small amounts of ethanol, phenethylalcohol, glycerin and Melissa officinalis.
	Lactokine™ Fluid PF	in vivo ex vivo in vitro ☑ skin ☑ ☑
Application	Lactokine [™] Fluid PF is a multifunctional agent, suitable for a wide variety of skincare concepts. It effectively soothes and calms skin, accelerating the reduction of skin redness and irritation after external stresses. Additionally, Lactokine [™] Fluid PF vitalizes and energizes skin cells and induces the synthesis of collagen, yielding skin smoothing and firming properties, thus making it a potent anti-aging product. In other <i>in vivo</i> studies Lactokine [™] Fluid PF was shown to be very effective in skin lightening, reducing the production of melanin.	Dosage:2.0–5.0%pH range:5.8–7.0INCI Name:Milk ProteinLactokine™ Fluid PFis preserved withphenoxyethanol andsodium dehydroacetate.
 anti-wrinkle, firming, smoothing soothing, calming, anti-stress skin lightening skin protection 	Lactokine™ Fluid PF contains a network of activated and stabilized signal molecules derived from milk.	
	ProBarrier [™] CLR	in vivo ex vivo in vitro ☑ skin
	ProBarrier™ CLR, a suspension of waxy particles based on caprylic/capric triglycerides and Copernicia cerifera (carnauba)	Dosage: 3.0% pH range: 4.5–7.5

caprylic/capric triglycerides and Copernicia cerifera (carnauba) wax, is a highly technological skincare ingredient which creates a persistent but non-occlusive film on the skin. It is especially designed for cosmetic formulations which aim to shield the skin against harsh environmental conditions, providing an extra layer of protection and an excellent light skin feel.

pH range: 4.5–7.5

INCI Name:

Water, Caprylic/Capric Triglyceride, Copernicia Cerifera (Carnauba) Wax, Decyl Glucoside, Pentylene Glycol

ProBarrier™ CLR

is stabilized with pentylene glycol.

Carrot Oil CLR

ANTI-AGING



Application skin protection

Carrot Oil CLR is especially suitable for anti-aging skin care, sun and after-sun care, and all skincare concepts for obtaining an even and harmonious skin color. Carrots are renowned for their high content of B-carotene, which is further enriched in Carrot Oil CLR to obtain optimal results for the skin, providing skin with much needed protection.

Carrot Oil CLR is a lipophilic extract of Daucus carota sativa in stabilized soybean oil, enriched with anti-oxidative B-carotene to 3,300 IU/g.

in vivo ex vivo in vitro

Dosage: 0.5-5.0%

INCI Name:

Glycine Soja (Soybean) Oil, Daucus Carota Sativa (Carrot) Root Extract, Beta-Carotene, Tocopherol

Carrot Oil CLR is stabilized with a natural tocopherol concentrate.

	Wheat Germ Oil CLR	in vivo	ex vivo	in vitro
	Wheat Germ Oil CLR is particularly suitable for skin protection concepts and the care of sensitive and severely dry skin and lips. Wheat Germ Oil has an extensive history of use. For cen- turies, it has been used for a wide variety of skincare applications, for instance for its healing properties and for the treatment of many different skin ailments. Wheat Germ Oil CLR is obtained from freshly milled wheat germs renowned for their high antioxidant content.	Dosage: INCI Name Triticum Vu		6 at) Germ Oil
Application skin protection soothing, calming, anti-stress 				

Soluvit Richter NP	in vivo	ex vivo	in vitro	



Application

□ skin regeneration

□ anti-hair loss

Soluvit Richter NP is suitable for a wide variety of skin and haircare concepts, such as the treatment of eye bags, dark circles, bruises and the care of tired legs and nails, but also for anti-hair loss.

Soluvit Richter NP is based on an extract of horse chestnut enriched with vitamins A, E, F, H (biotin) and vitamins of the B group. Horse chestnut has a rich history of use in traditional and modern medicine, especially for its stimulating and energizing properties. The vitamins show an extensive range of potential benefits for both skin and hair.

Dosage: 1.0-5.0% pH range: 3.0-10.0

INCI Name:

Water, Alcohol, PEG-35 Castor Oil, Polysorbate 20, Aesculus Hippocastanum (Horse Chestnut) Seed Extract, Retinyl Palmitate, Tocopherol, Inositol, Calcium Pantothenate, Linoleic Acid, Biotin

Soluvit Richter NP is unpreserved.





MultiMoist CLR[™]

Mapping the moisturization puzzle



MultiMoist CLR™



Application

- moisturizing
- hair conditioning and protection

MultiMoist CLR™ activates production of the vitamin D receptor (VDR) and promotes the VDR's activation. MultiMoist CLR™ also potentiates the effect of vitamin D. As a consequence the skin becomes more moisturized. By making use of 5 different objective instrumental approaches, the immediate and long term moisturizing properties of MultiMoist CLR™ were convincingly proven. Additionally, the activity of MultiMoist CLR™ was proven in a consumer study, where the subjective improvement of skin moisture content, skin smoothness and the look of skin were confirmed.

MultiMoist CLR™ consists of a powerful synergistic blend of fructooligosaccharides and beta vulgaris (beet) root extract.

in vivo	ex vivo	in vitro	
🗹 skin	🗹 hair	\checkmark	

Dosage: 3.0% **pH range:** 3.0–8.0

INCI Name:

Fructooligosaccharides, Beta Vulgaris (Beet) Root Extract, Water

MultiMoist CLR™ is unpreserved.



Maricol S

At the root of modern-day skincare regimens

2	

- Application
- moisturizing
- hair conditioning and protection

DayMoist CLRTM potently and immediately increases the concentration of the natural moisturizing factors (NMF) in the upper layers of the skin, resulting in immediate and long-lasting moisturizing effects. These results were obtained by making use of Confocal Raman Microspectros-copy and analyzing skin capacitance. Additionally, DayMoist CLRTM has potent haircare properties (see the haircare section in this brochure).

DayMoist CLR™ is a complex of natural plant-derived active ingredients.

🛾 skin	🗹 hair	

vivo

in vitro

Dosage: 1.0–3.0% **pH range:** 3.0–10.0

INCI Name: Water, Hydrolyzed Corn Starch,

Beta Vulgaris (Beet) Root Extract

DayMoist CLR™ is unpreserved.



Application

- moisturizing
- hair conditioning and protection

Hygroplex[™] HHG

Hygroplex[™] HHG is a physiological moisturizer, specifically designed to be fully adapted to the water-binding capacity of human skin, containing ingredients similar to the Natural Moisturizing Factors (NMF) in the skin. It is extremely suitable for skincare concepts for dry and aged skin and can be used in any skincare application for any type of skin which needs hydration. Hygroplex[™] HHG effectively moisturizes and smoothes the skin.

Additionally, it has shown to be a potent moisturizer for hair, increasing its water content and improving its mechanical properties.

Also available as **Hygroplex™ WHN** without hexyl nicotinate.

Dosage: Skin: 2.0–5.0%

ex vivo

☑ hair

in vitro

Hair: 1.0% **pH range:** 3.0–10.0

INCI Name:

in vivo

🗹 skin

Hexylene Glycol, Fructose, Glucose, Sucrose, Urea, Dextrin, Alanine, Glutamic Acid, Aspartic Acid, Hexyl Nicotinate

Hygroplex™ HHG is unpreserved.

Glycoderm™ (P)	in vivo ☑ skin	ex vivo	in vitro	
	()	·	(



Application

- moisturizing
- barrier maintenance and repair

Glycoderm[™] (P) is a liposomal moisturizer, where plant derived liposomal bilayers contain biotechnologically produced hyaluronic acid and natural blossom honey. Its liposomal structure supports quick absorption of hyaluronic acid and blossom honey.

Consequently, GlycodermTM (P) constitutes a polyvalent approach toward skin hydration by supporting the maintenance and recovery of the skin's lipid barrier function and supplying the skin with essential ingredients that are able to bind water and moisturize skin.

Dosage: 3.0–5.0% **pH range:** 3.0–10.0

INCI Name:

Water, Honey, Phospholipids, Sphingolipids, Hyaluronic Acid

Glycoderm[™] (P)

is preserved with phenoxyethanol and sodium dehydroacetate.

	Ceramide Complex CLR™ PE-F	in vivo ex vivo in vitro
	Ceramide Complex CLR [™] PE-F supplies skin with structural elements and supports the recovery and maintenance of the skin's healthy barrier function and water-holding capacity. Ceramide Complex CLR PE-F contains phyto lipids in lamellar, liquid crystalline form. The plant-derived lipid mixture con- sists of phospholipids and sphingolipids. It is easily able to penetrate skin and also moisturizes hair.	Dosage: 5.0–10.0% pH range: 3.0–10.0 INCI Name: Water, Pentylene Glycol Phospholipids, Sphingolipids Ceramide Complex CLR™ PE-F is unpreserved.
 Application moisturizing barrier maintenance and repair hair conditioning and 		

hair conditioning	and
protection	

moisturizing

	Maricol S	in vivo	ex vivo i	n vitro □
6	Due to its film-forming and skin-protective properties, Maricol S is especially suitable for the care of dry and mature skin as well as skin stressed by negative environmental influences. Maricol S is a native soluble collagen of marine origin, ob- tained from fish skin.	Maricol S	3.0–10.0% 4.5–6.5 e: Soluble Col d with sodium	5
Application				

CutiBiome CLR™

Calibrating the skin's ecosystem

|--|



Application

- anti-acne
- soothing, calming,
- anti-stress
- scalp care

CutiBiome CLR™ is a synergistic complex of lipophilic extracts from manuka, black pepper and magnolia. It provides essential support for the natural balance between skin and its microbiota in difficult situations, like acne and dandruff.

CutiBiome CLR™ reduces the film forming activity and significantly inhibits the growth of virulent phylotypes of Cutibacterium acnes. In vitro and in vivo studies show that it strongly reduces inflammation involved in acne and dandruff. On people suffering from acne, the use of CutiBiome CLR[™] leads to a dramatic and perceivable reduction of sebum production, comedones, pustules and pimples.

Dosage: 1.5-3.0% **pH range:** 4.0–7.0

INCI Name:

Octyldodecanol, Leptospermum Scoparium Branch/Leaf Oil, Piper Nigrum Seed Extract, Magnolia Officinalis Bark Extract

CutiBiome CLR™ is unpreserved.

-			
	-	-	
	-		

Application

- soothing, calming, anti-stress
- □ scalp care

AnnonaSense CLR™

AnnonaSense CLR™ provides the skin with means to establish a sustainable homeostatic balance, improving skin health and well-being. The potent adaptogenic action of AnnonaSense CLR™ supports the skin's endocannabinoid system by activating the CB2 receptor. Through this action, it reduces inflammatory processes induced by TRPV1. Histamine-, as well as TNFa/Substance P-induced stress is down-regulated and the expression of a vital detrimental receptor in skin, IL-31RA, is decreased. AnnonaSense CLR™ makes the skin less sensitive and more balanced, even itch is perceivably reduced. Skin appearance is improved and the perception of well-being and quality of life is enhanced.

AnnonaSense CLR[™] is obtained from Annona Cherimola, common name Cherimoya, an edible fruit originating from South America.

Dosage: 3.0% **pH range:** > 5.2

INCI Name:

in vivo

⊠ skin

Annona Cherimola Fruit Extract

ex vivo

in vitro

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AnnonaSense CLR™

is preserved with sodium dehydroacetate and phenylpropanol.



Application

- soothing, calming, anti-stress
- barrier maintenance and repair
- □ scalp care

SyriCalm[™] CLR (PC)

SyriCalm[™] is a natural product derived from *Poria* cocos and Phragmites. It effectively reduces inflammation and strongly supports skin in dealing with external stresses.

Additionally, SyriCalm[™] is designed to give effective support where the skin is challenged by environmental stress, e.g. shaving, depilation or daily hygiene. It helps the skin recover its natural balance.

🗹 skin	\checkmark

ex vivo

in vitro

Dosage: 3.0% pH range: 3.0-8.0

INCI Name:

in vivo

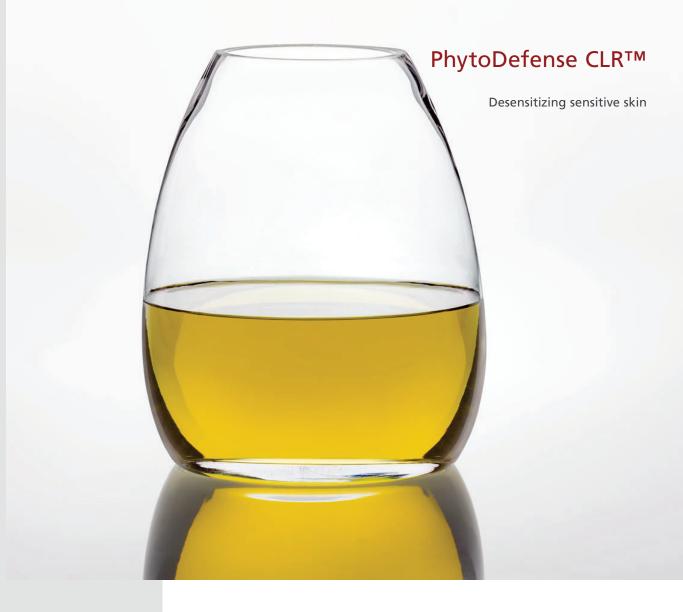
17 skin

Water, Phragmites Communis Extract, Poria Cocos Extract

Also available as SyriCalm™ CLR **INCI** Name:

Water, Phragmites Karka Extract, Poria Cocos Extract

Both versions of **SyriCalm™** are preserved with sodium benzoate.



PhytoDefense CLR™



Application

- soothing, calming,
- anti-stress
- scalp care

PhytoDefense CLR[™] is carefully designed for the care of hyper-reactive and irritable skin. It essentially reduces the sensitivity of skin by its goal-oriented approach to the most important features of sensitive skin: burning/stinging/itching sensations and skin redness. Skin irritations as well as skin redness are noticeably reduced.

PhytoDefense CLR[™] is obtained from *Magnolia grandiflora*, known in traditional medicine for its potent calming and soothing properties.

🗹 skin 🛛 🗆	in	vivo	ex vivo	in vitro
	\checkmark	skin		

Dosage: 3.0% **pH range:** 4.0–7.0

INCI Name:

Glycine Soja (Soybean) Oil, Dicaprylyl Ether, Magnolia Grandiflora Bark Extract, Lauryl Alcohol

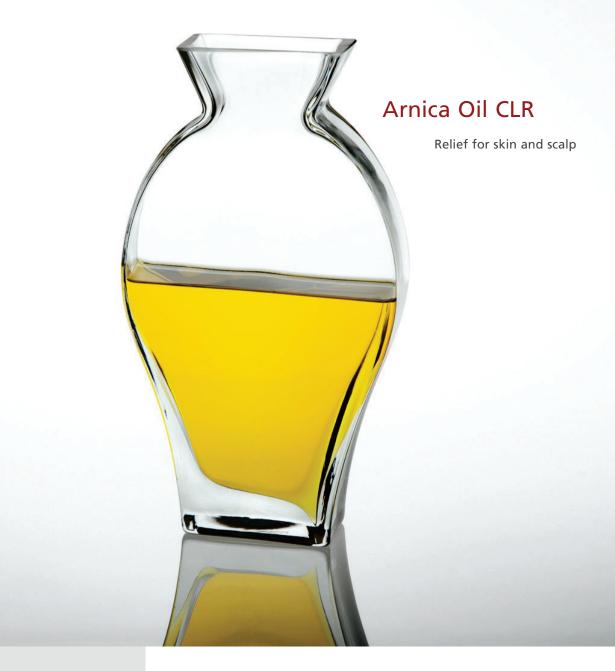
PhytoDefense CLR™

is stabilized with a natural rosemary extract concentrate.

	Modukine™	in vivo ex vivo in vitro ☑ skin □ ☑
Application anti-stress moisturizing barrier maintenance and repair	Modukine [™] is a milk-derived active ingredient which is specifically designed for the effective regenerative care of sensitive, dry and troubled skin. It is intended for any type of skin which shows chronic and pronounced inflammation. Modukine [™] acts as an extremely potent biological cell response modifier. It strongly reduces inflammatory pro- cesses in the skin at a cellular level and helps to restore skin barrier and normal skin functionality.	Dosage: 0.5% pH range: 6.0–7.0 INCI Name: Lactose, Milk Protein Modukine™ is unpreserved.
	Lactokine™ Fluid PF	in vivo ex vivo in vitro ☑ skin ☑ ☑
Application anti-wrinkle, firming, smoothing soothing, calming, anti-stress skin lightening skin protection	Lactokine [™] Fluid PF is a multifunctional agent, suitable for a wide variety of skincare concepts. It effectively soothes and calms skin, accelerating the reduction of skin redness and ir- ritation after external stresses. Additionally, Lactokine [™] Fluid PF vitalizes and energizes skin cells and induces the syn- thesis of collagen, yielding skin-smoothing and firming prop- erties, thus making it a potent anti-aging product. In other <i>in vivo</i> studies Lactokine [™] Fluid PF was shown to be very effective in skin lightening, reducing the production of mel- anin. Lactokine [™] Fluid PF contains a network of activated and sta- bilized signal molecules derived from milk.	Dosage:2.0–5.0%pH range:5.8–7.0INCI Name:Milk ProteinLactokine™ Fluid PFis preserved with phenoxyethanoland sodium dehydroacetate.
	ProBioBalance CLR [™] NP activates cellular processes involved in cellular nutrition and helps activate detoxification pro- cesses. The metabolic activity of skin cells is increased, and the skin's immune system strengthened and protected against environmental stress. The application of ProBioBalance CLR [™] NP leads to reduction of skin inflammation and also actively prepares skin for external stresses.	in vivoex vivoin vitro☑ skin☑☑Dosage:2.0–5.0%pH range:5.8–7.0INCI Name:Water, Lactose, Milk Protein, Bifida Ferment Lysate

ProBioBalance CLR[™] NP consists of postbiotic bifido cultures which are suspended and disintegrated in a biologically active milk-based matrix.

 Application
 soothing, calming, anti-stress
 skin protection **ProBioBalance CLR™ NP** is stabilized with phenethyl alcohol.



Calendula Oil CLR



Application soothing, calming, anti-stress Calendula Oil CLR is particularly suitable for skin and haircare concepts where soothing and calming properties are valued, such as baby care, care for sensitive skin, elderly skin and irritated scalp. Calendula has been extensively used in both traditional and modern medicine for its well-described antiinflammatory properties.

Calendula Oil CLR is obtained by an extremely mild extraction of the blossoms of *Calendula officinalis* in stabilized soybean oil.

Also available as **Organic Calendula Oil CLR**, which is based on organic calendula blossoms and organic soybean oil compliant with Regulation (EC) No 834/2007 on organic production of agricultural products.

in vivo	ex vivo	in vitro

Dosage: 3.0–10.0 %

INCI Name:

Glycine Soja (Soybean) Oil, Calendula Officinalis Flower Extract, Tocopherol

Calendula Oil CLR is stabilized with a natural tocopherol concentrate.

 Arnica Oil CLR	in vivo □	ex vivo	in vitro
Arnica Oil CLR is suitable for a wide variety of skin and hair- care concepts, such as anti-hair loss, relief for troubled skin, and after-sun care. Arnica is renowned for its ability to stim- ulate and heal the skin, which is illustrated by its extensive use in the treatment of bruises and sprains. It is also known for its calming and soothing properties.		Montana F)% oja (Soybean) lower Extract,

Arnica Oil CLR is obtained by an extremely mild extraction of the blossoms of Arnica montana in stabilized soybean oil. Arnica Oil CLR

is stabilized with a natural tocopherol concentrate.

St. John's Wort Oil CLR

St. John's Wort Oil CLR is particularly suitable for the care of dry, sensitive and problem skin, chapped lips, and in the support of irritated skin. St. John's Wort has been traditionally used in medicinal applications to treat insect bites, sunburn, bruises and edema.

St. John's Wort Oil CLR contains the lipophilic components of the aerial parts of the St. John's Wort plant (Hypericum perforatum), collected when in blossom and gently extracted in olive oil.

Dosage: 2.0-10.0%

ex vivo

in vitro

INCI Name:

in vivo

Olea Europaea (Olive) Fruit Oil, Hypericum Perforatum Flower/Leaf/ Stem Extract, Tocopherol

St. John's Wort Oil CLR is stabilized with a natural tocopherol concentrate.



- Application
- □ soothing, calming, anti-stress
- □ hair conditioning and protection

Hexaplant[™] / Sedaplant[™] Richter

Hexaplant[™] Richter and Sedaplant[™] Richter are applicable in a wide variety of skin and haircare concepts, such as baby care, and care for sensitive skin and scalp.

Hexaplant[™] Richter and Sedaplant[™] Richter contain potent mixtures of extracts from fennel, hops, chamomile, balm mint, mistletoe and yarrow. Sedaplant™ Richter additionally contains urea and allantoin. All ingredients are well known and well appreciated in both traditional medicine and modern science, especially for their skin-healing and soothing properties.

in vitro in vivo ex vivo

Dosage: 2.0-5.0% **pH range:** 3.0–10.0

INCI Name:

Hexaplant™: Water, Alcohol, Foeniculum Vulgare (Fennel) Fruit Extract, Humulus Lupulus (Hops) Extract, Melissa Officinalis Leaf Extract, Viscum Album (Mistletoe) Leaf Extract, Chamomilla Recutita (Matricaria) Flower Extract, Achillea Millefolium Extract

Sedaplant™: Water, Alcohol, Foeniculum Vulgare (Fennel) Fruit Extract, Humulus Lupulus (Hops) Extract, Melissa Officinalis Leaf Extract, Viscum Album (Mistletoe) Leaf Extract, Chamomilla Recutita (Matricaria) Flower Extract, Achillea Millefolium Extract, Urea, Allantoin

Hexaplant[™] Richter and Sedaplant™ Richter are unpreserved.



Application □ soothing, calming,





Application □ soothing, calming,

anti-stress

ProRenew Complex CLR™

Postbiotic support for skin and its microbiota



BARRIER MAINTENANCE AND REPAIR

ProRenew Complex CLR™



Application

- skin regeneration
- barrier maintenance and repair
- skin protection
- scalp care

ProRenew Complex CLR[™] acts on essential features in the aging process of the skin, its ability to successfully adapt to a constantly changing environment and to effectively renew itself.

ProRenew Complex CLR[™] positively influences the speed and quality of epidermal growth. It has shown to effectively promote desquamation, the shedding of dead cells. ProRenew Complex CLR[™] is beneficial for both the health of skin and the skin microbiota. It balances and protects the skin microbiota and supports it in dealing with day-to-day stress. in vivo ex vivo in vitro ☑ skin □ ☑

Dosage: 3.0% **pH range:** 4.0–7.0

INCI Name: Lactococcus Ferment Lysate

ProRenew Complex CLR™ is preserved with sodium benzoate.

Also available as **ProRenew Complex CLR™ NP**, stabilized with phenylpropanol and levulinic acid/sodium levulinate.

SyriCalm[™] CLR (PC)



Application

- soothing, calming, anti-stress
- barrier maintenance and repair
- □ scalp care

SyriCalm[™] is a natural product derived from *Poria cocos* and *Phragmites*. It effectively reduces inflammation and strongly supports skin in dealing with external stresses.

Additionally, SyriCalm[™] is designed to give effective support where the skin is challenged by environmental stress, e.g. shaving, depilation or daily hygiene. It helps the skin recover its natural balance.

in vivo ex vivo in vitro ☑ skin □ ☑

Dosage: 3.0% pH range: 3.0–8.0

INCI Name:

Water, Phragmites Communis Extract, Poria Cocos Extract

Also available as **SyriCalm™ CLR INCI Name:** Water, Phragmites Karka Extract, Poria Cocos Extract

Both versions of **SyriCalm™** are preserved with sodium benzoate.

Vitamin F forte	in vivo ⊠ skin	ex vivo ☑ hair	in vitro	
				_



Application

- moisturizing
- barrier maintenance and repair
- hair conditioning and protection

Vitamin F forte nurtures, protects and acts as a skin conditioner. It is particularly suitable for the treatment of dry, stressed and sensitive skin, potently supporting the skin in rebuilding and maintaining its natural healthy structure and functionality. Vitamin F forte also has some great benefits for hair (see the haircare section of this brochure).

Vitamin F forte contains natural polyunsaturated essential free fatty acids originating from safflower oil, with a particularly high content of linoleic acid.

Also available as Vitamin F water-soluble CLR in watersoluble form. In addition, essential fatty acids in ester form are available as Vitamin F Ethyl Ester CLR and Vitamin F Glyceryl Ester CLR. **Dosage:** 0.5–3.0% **pH range:** 3.0–10.0

INCI Name:

Linoleic Acid, Linolenic Acid

Vitamin F forte

is stabilized with a natural tocopherol concentrate.

in vivo ⊠ skin	ex vivo	in vitro ☑	



Application

- soothing, calming, anti-stress
- moisturizing
- barrier maintenance and repair

Modukine[™] is a milk-derived active ingredient which is specifically designed for the effective regenerative care of sensitive, dry and troubled skin. It is intended for any type of skin which shows chronic and pronounced inflammation.

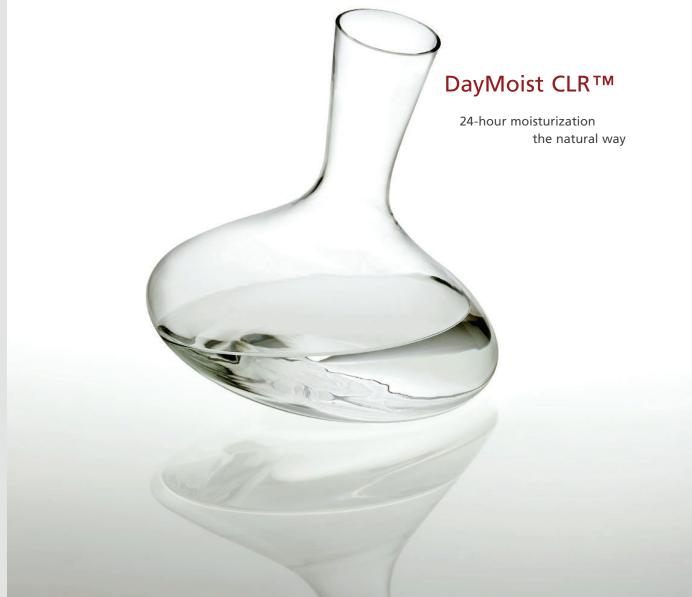
Modukine™

Modukine[™] acts as an extremely potent biological cell response modifier. It strongly reduces inflammatory processes in the skin at a cellular level and helps to restore skin barrier and normal skin functionality.

Dosage: 0.5% **pH range:** 6.0–7.0

INCI Name: Lactose, Milk Protein

Modukine[™] is unpreserved.



CutiBiome CLR™



Application

- anti-acne
- soothing, calming, anti-stress
- scalp care

CutiBiome CLR[™] is a synergistic complex of lipophilic extracts from manuka, black pepper and magnolia. It provides essential support for the natural balance between skin and its microbiota in difficult situations, like acne and dandruff.

CutiBiome CLRTM was shown to reduce expression of 5α -reductase and the production of inflammatory mediators. *In vivo* studies showed potent reduction of dandruff. CutiBiome CLRTM supports the scalp microbiota to return to its normal healthy state, more effectively than Piroctone Olamine. It also outperforms this benchmark ingredient in reducing scalp oiliness, scalp sensitivity and itch.

n vivo	ex vivo	in vitro
⊠ skin		\checkmark

Dosage: 1.5–3.0% pH range: 4.0–7.0

INCI Name:

Octyldodecanol, Leptospermum Scoparium Branch/Leaf Oil, Piper Nigrum Seed Extract, Magnolia Officinalis Bark Extract

CutiBiome CLR™ is unpreserved.

MultiMoist CLR™	in vivo ⊠ skin	ex vivo ☑ hair	in vitro ☑
MultiMoist CLR™ binds water in the cortex of hair, im-	Dosage:	1.0%	

proving a variety of important hair gualities. It is a hair conditioner, improving its combability and handling. MultiMoist CLR[™] also protects against color fading caused by repeated washing with shampoo. It dramatically reduces hair breakage from combing and MultiMoist CLR™ has a strong impact on static flyaway too. Hair frizziness is significantly reduced as well.

MultiMoist CLR™ consists of a powerful synergistic blend of fructooligosaccharides and beta vulgaris (beet) root extract.

pH range: 3.0–8.0

INCI Name:

Fructooligosaccharides, Beta Vulgaris (Beet) Root Extract, Water

MultiMoist CLR™ is unpreserved.

Application anti-hair loss

Application moisturizing hair conditioning and protection

Follicusan™ DP	in vivo ⊠ hair	ex vivo	in vitro ☑
Follicusan [™] DP stimulates the functionality of the dermal papilla cells at the base of the hair follicles, thus counter- acting premature hair loss. It increases the number of anagen hair follicles (growth stage) and decreases that of telogen hair follicles (resting stage). Hair density as well as cumulative hair thickness is increased. Follicusan [™] DP contains biologically active signaling proteins, ethyl panthenol (provitamin B5), inositol as well as acetyl cysteine and acetyl methionine in a water-ethanol	Ethyl Ether, Inositol, Ac	e: ohol Denat , Milk Prote cetyl Cysteir e, Sodium (., Panthenyl in, Lactose, ne, Acetyl

Follicusan[™] DP

is preserved with phenoxyethanol and sodium dehydroacetate.

ex vivo

☑ hair

in vitro

	/			
-		~)	
	2			

Application

- moisturizing
- hair conditioning and protection

DayMoist CLR™

medium.

DayMoist CLR™ is a hair conditioner, improving hair combability and manageability. Additionally, it was shown to positively influence the mechanical properties of hair and to protect against fading of hair color in dyed hair. DayMoist CLR™ also effectively protects hair against heat that is applied during hair straightening. Apart from these features for hair care, DayMoist CLR™ is also proven to be a potent skin moisturizer (see the moisturizer section in this brochure).

DayMoist CLR™ is a complex of natural plant-derived active ingredients.

Dosage: 1.0% pH range: 3.0-10.0

INCI Name:

in vivo

🗹 skin

Water, Hydrolyzed Corn Starch, Beta Vulgaris (Beet) Root Extract

DayMoist CLR[™] is unpreserved.

ProRenew Complex CLR™

Glyceryl Ester CLR.





Application

- skin regeneration
- barrier maintenance and repair
- skin protection
- scalp care

ProRenew Complex CLR[™] is a postbiotic ingredient based on *Lactococcus lactis*. Elaborate studies have shown that it has important benefits for both the health of the skin and the skin microbiome. Skin becomes less sensitive and more robust and the skin microbiome is supported strongly.

ProRenew Complex CLR[™], even as part of shampoos, improves the condition of the scalp and makes it less oily. It additionally leads to perceivable reduction of the sensitivity of the scalp, makes scalp tangibly healthier and reduces attributes related to dryness of the scalp. ProRenew Complex CLR[™] provides important support for the skin and the scalp, even from rinse-off formulations.

in vivo	ex vivo	in vitro	
🗹 skin		\checkmark	

Dosage: 3.0% **pH range:** 4.0–7.0

INCI Name: Lactococcus Ferment Lysate

ProRenew Complex CLR™

is preserved with sodium benzoate.

Also available as

ProRenew Complex CLR™ NP, stabilized with phenylpropanol and levulinic acid/sodium levulinate.

Vitamin F forte	in vivo ⊠ skin	ex vivo ☑ hair	in vitro
Vitamin F forte is a strong hair conditioner, improving hair combability, and has shown to protect against hair breakage. In addition it has many positive features for skin (see the section on barrier maintenance and repair of this brochure).	Dosage: pH range: INCI Name		
Vitamin F forte contains natural polyunsaturated essential free fatty acids originating from safflower oil, with a particularly high content of linoleic acid.	Linoleic Acid, Linolenic Acid		
Also available as Vitamin F water-soluble CLR in water- soluble form. In addition, essential fatty acids in ester form are available as Vitamin F Ethyl Ester CLR and Vitamin F			

Application

- moisturizingbarrier maintenance
- and repair
- hair conditioning and protection

Other active ingredients for hair care: Hygroplex[™] HHG (p. 10), Ceramide Complex CLR[™] PE-F (p. 11) For scalp care: AnnonaSense CLR[™] (p. 13), PhytoDefense CLR[™] (p. 14), SyriCalm[™] CLR (PC) (p. 13)

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