CLR · Product Overview

| CLR PRODUCT GROUP | PS | APPLICATION | | | | | | CERTIFICATION | | | | | | | |
|---|----------------------|-------------------------------------|-------------------|-----------------|-----------------|--------------|-----------------------------------|---------------|-----------------------------------|----------------------------------|----------------|------------|-----------------|-------|------------|
| ANTI-AGING MOISTURIZERS SENSITIVE & OILY SKIN BARRIER MAINTENANCE AND REP HAIR CARE | 4–8 9–11 12–17 | 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 | QUASI DRUG | CHINA COMPLIANT | НАГАГ | SOLUBILITY |
| PRODUCT NAME | | SMC | SKII | SKI | SKI | MO | SOC | AN | BAR | HAI | AN | ΔU, | B | HAI | 201 |
| AnnonaSense CLR™ | 13 | | | | | | | | | | | | С | Н | WS |
| Arnica Oil CLR | 17 | | | | | | | | | | | Q | C | 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™ K | 11 | | | | | | | | | | | Q | С | | WS |
| CutiBiome CLR™ | 13, 20 | | | | | | | | | | | | С | Н | os |
| 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™ | 5 | | | | | | | | | | | | 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 | | WS |
| PhytoDefense CLR™ | 14 | | | | | | | | | | | | С | Н | os |
| Phytosan™ K | 5 | | | | | | | | | | | Q | С | Н | WS |
| ProBarrier™ CLR | 7 | | | | | | | | | | | | С | | wd |
| ProBioBalance CLR™ NP | 15 | | | | | | | | | | | Q | С | | WS |
| ProRenew Complex CLR™ | 4, 18 | | | | | | | | | | | | 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.

For information on natural certifications, such as COSMOS and NATRUE (1), see: https://www.clr-berlin.com//products.

☐ recommended

Application

tested

H: HALAL-certified (1) Q: Can be used in Japan as a (non)-functional ingredient in Quasi Drugs

C: Ingredients listed in IECIC-list (Inventory of Existing Cosmetic Ingredients in China)

(1) For current certification validities please see https://www.clr-berlin.com/category/certifications/

Efficient actives and concepts for cosmetics

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.

ProRenew Complex CLR™

Postbiotic support for skin and its microbiota



ProRenew Complex CLR™

Application

- skin regeneration
- barrier maintenance and repair
- skin protection

Based on probiotic technology, ProRenew Complex CLRTM 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.

MPC[™]-Milk Peptide Complex

in vivo ☑ skin ex vivo

in vitro ☑



Application

- anti-wrinkle, firming, smoothing
- skin regeneration

MPCTM 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 MPCTM make the skin firmer and improve its elasticity. MPCTM 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

INCI Name: Whey Protein

MPC™-Milk Peptide Complex

is unpreserved.

Phytosan™ K



Application

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

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PhytosanTM K exerts a potent influence against skin aging. It activates cellular repair processes, supporting the maintenance of cellular integrity and energy after UV irradiation. Both are important factors in counteracting photoaging.

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 depth. Phytosan[™] K counteracts biological and UV-induced premature aging of the skin.

Phytosan[™] K contains proteins, glycoproteins and polysaccharides isolated from organic soybeans (GMO-free).

in vivo ex vivo in vitro ☑ skin □ ☑

Dosage: 2.0–5.0% pH range: 3.0–7.5

INCI Name:

Water, Glycerin, Glycine Soja (Soybean) Seed Extract

Phytosan™ K

is preserved with phenoxyethanol and potassium sorbate.

JuvenEye CLR™



Application

- skin regeneration
- skin lightening

Based on a synergistic combination of extracts of *Hieracium pilosella* and the flowers of *Bellis perennis*, JuvenEye CLRTM 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 CLRTM 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 CLRTM, melanin deposition in the skin is reduced and overall skin health is improved.

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

in vivo ex vivo in vitro
☑ skin □ ☑

Dosage: 3.0–5.0% pH range: 4.5–6.5

INCI Name:

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

JuvenEye CLR™

is preserved with sodium benzoate and sodium dehydroacetate.



Repair Complex CLR™ PF

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

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 ex vivo in vitro ✓ skin $\sqrt{}$

5.0-10.0%

skin.

pH range: 3.8-7.0

INCI Name:

Dosage:

Bifida Ferment Lysate

Repair Complex CLR™ PF

is preserved with phenoxyethanol and sodium benzoate.



Application skin protection

Belides™ ORG



Application

■ skin lightening

Belides™ ORG is a natural skin-lightening agent, derived from organic daisy flowers (*Bellis perennis*). It is suitable for any skincare concept providing even and luminous complexion and radiant skin.

BelidesTM ORG's action is based on a potent, multifaceted reduction in the activity of melanocytes. BelidesTM ORG influences different cellular pathways involved in melanogenesis, 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.

in vivo ☑ skin ex vivo

in vitro ☑

Dosage: 2.0–5.0% pH range: 4.5–6.5

INCI Name:

Bellis Perennis (Daisy) Flower Extract

Belides™ ORG

is stabilized with phenethyl alcohol.

Also available as

Belides™ NP.

stabilized with small amounts of ethanol, phenethylalcohol, glycerin and *Melissa officinalis*.

Lactokine™ Fluid PF



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 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 *in vivo* studies Lactokine[™] Fluid PF was shown to be very effective in skin lightening, reducing the production of melanin.

Lactokine™ Fluid PF contains a network of activated and stabilized signal molecules derived from milk.

in vivo ex vivo in vitro
☑ skin ☑ ☑

Dosage: 2.0–5.0% pH range: 5.8–7.0

INCI Name: Milk Protein

Lactokine™ Fluid PF is preserved with phenoxyethanol and sodium dehydroacetate.

ProBarrier™ CLR



Application■ skin protection

ProBarrier™ CLR, a suspension of waxy particles based on 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.

in vivo ex vivo in vitro

✓ skin

☐

3.0%

pH range: 4.5–7.5

INCI Name:

Dosage:

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

ProBarrier™ CLR

is stabilized with pentylene glycol.

Application

skin protection

Carrot Oil CLR

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.

Dosage: 0.5-5.0%

INCI Name:

in vivo

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

ex vivo

in vitro

Carrot Oil CLR

is stabilized with a natural tocopherol concentrate.

Wheat Germ Oil CLR



Application skin protection

soothing, calming, anti-stress

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 centuries, 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.

in vivo ex vivo in vitro

Dosage: 2.0-5.0%

INCI Name:

Triticum Vulgare (Wheat) Germ Oil

Soluvit Richter NP



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.

in vivo ex vivo in vitro П

1.0-5.0% Dosage: 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

☑ skin ☑ hair

ex vivo in vitro
☑ hair ☑

Dosage: 3.0% pH range: 3.0–8.0

INCI Name:

Fructooligosaccharides, Beta Vulgaris (Beet) Root Extract, Water

MultiMoist CLR™

is unpreserved.



Hygroplex[™] HHG

The physiological skin and hair moisturizer

DayMoist CLR™

Application

moisturizinghair conditioning and protection

DayMoist CLR™ 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 Microspectroscopy and analyzing skin capacitance. Additionally, DayMoist CLR™ has potent haircare properties (see the haircare section in this brochure).

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

in vivo ex vivo in vitro

☑ skin ☑ hair □

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 stabilized with plant-derived anisic acid.

Hygroplex™ HHG



Application

- moisturizing
- hair conditioning and protection

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.

in vivo ex vivo in vitro

☑ skin ☑ hair □

Dosage: Skin: 2.0–5.0% Hair: 1.0%

pH range: 3.0–10.0

INCI Name:

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

Hygroplex™ HHG is unpreserved.

Glycoderm™ (P)



Application

- moisturizing
- barrier maintenance and repair

GlycodermTM (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:

in vivo

☑ skin

Water, Honey, Phospholipids, Sphingolipids, Hyaluronic Acid

ex vivo

in vitro

Glycoderm™ (P)

is preserved with phenoxyethanol and sodium dehydroacetate.

Ceramide Complex CLR™ K



Application

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

Ceramide Complex CLRTM K supplies skin with structural elements and supports the recovery and maintenance of the skin's healthy barrier function and water-holding capacity.

Ceramide Complex CLRTM K contains 2% lipids in lamellar liquid crystalline form. The plant-derived lipid mixture consists of phospholipids and at least 10% sphingolipids, and is easily able to penetrate skin.

Ceramide Complex CLR™ K also moisturizes hair.

in vivo ex vivo in vitro

Dosage: 5.0–10.0% pH range: 3.0–10.0

INCI Name:

Water, Phospholipids, Sphingolipids

Ceramide Complex CLR™ K is preserved with phenoxyethanol and potassium sorbate.

Maricol S



Application■ moisturizing

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, obtained from fish skin.

in vivo ex vivo in vitro
□ □ □

Dosage: 3.0–10.0% pH range: 4.5–6.5

INCI Name: Soluble Collagen

Maricol S

is preserved with sodium benzoate.

CutiBiome CLR™



CutiBiome CLR™



Application

- anti-acne
- soothing, calming, anti-stress

CutiBiome CLRTM 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 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 CLRTM 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:

in vivo

☑ skin

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

ex vivo

in vitro

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CutiBiome CLR™ is unpreserved.

AnnonaSense CLR™



Application

■ soothing, calming,
anti-stress

AnnonaSense CLRTM provides the skin with means to establish a sustainable homeostatic balance, improving skin health and well-being. The potent adaptogenic action of AnnonaSense CLRTM 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 TNFα/Substance P-induced stress is down-regulated and the expression of a vital detrimental receptor in skin, IL-31RA, is decreased. AnnonaSense CLRTM 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.

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|----------|---------|--------------|
| ☑ skin | | \checkmark |
| | | |

Dosage: 3.0% pH range: > 5.2

INCI Name:

Annona Cherimola Fruit Extract

AnnonaSense CLR™

is preserved with sodium dehydroacetate and phenylpropanol.

SyriCalm™ CLR (PC)



Application

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

SyriCalmTM 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 □ ☑

ex vivo

in vitro

Dosage: 3.0% pH range: 3.0–8.0

INCI Name:

in vivo

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 PhytoDefense CLRTM 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.

in vivo ex vivo in vitro

☑ 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™



Dosage:

ex vivo

0.5%

INCI Name: Lactose, Milk Protein

in vitro $\sqrt{}$



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 processes in the skin at a cellular level and helps to restore skin pH range: 6.0-7.0

Modukine™ is unpreserved.

Application

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

Lactokine™ Fluid PF

barrier and normal skin functionality.

ex vivo in vitro in vivo ✓ skin



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 in vivo studies Lactokine™ Fluid PF was shown to be very effective in skin lightening, reducing the production of mel-

Lactokine™ Fluid PF is a multifunctional agent, suitable for a

5.8-7.0 pH range:

Dosage:

INCI Name: Milk Protein

Application 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.

Lactokine™ Fluid PF

is preserved with phenoxyethanol and sodium dehydroacetate.

2.0-5.0%

ProBioBalance CLR™ NP

in vivo ✓ skin

ex vivo

in vitro



Application

- soothing, calming, anti-stress
- skin protection

ProBioBalance CLR™ NP activates cellular processes involved in cellular nutrition and helps activate detoxification processes. 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.

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

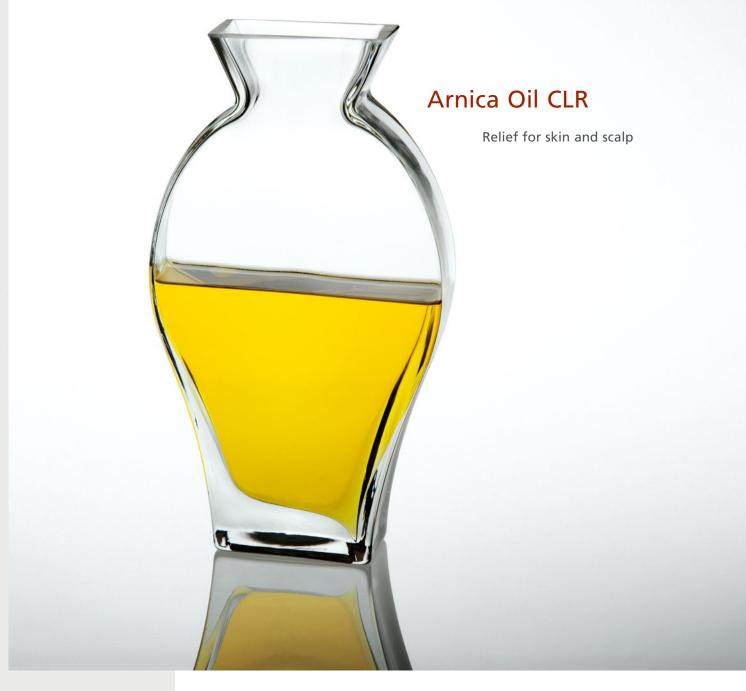
2.0-5.0% Dosage: pH range: 5.8-7.0

INCI Name:

Water, Lactose, Milk Protein, Bifida Ferment Lysate

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 anti-inflammatory 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 v

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



Application

- soothing, calming, anti-stress
- anti-hair loss

Arnica Oil CLR is suitable for a wide variety of skin and haircare concepts, such as anti-hair loss, relief for troubled skin, and after-sun care. Arnica is renowned for its ability to stimulate 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.

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

in vivo

ex vivo

in vitro

in vitro

Dosage: 3.0-10.0%

INCI Name: Glycine Soja (Soybean) Oil, Arnica Montana Flower Extract, Tocopherol

Arnica Oil CLR

is stabilized with a natural tocopherol concentrate.

St. John's Wort Oil CLR



Application soothing, calming, anti-stress

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.

ex vivo

INCI Name:

Dosage:

in vivo

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

2.0-10.0%

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

tocopherol concentrate.

Hexaplant™ / Sedaplant™ Richter



Application

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

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.

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

ex vivo

in vitro

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.



SyriCalm™ CLR (PC)

In defense of skin

ProRenew Complex CLR™

Application

- skin regeneration
- barrier maintenance and repair
- skin protection

Based on probiotic technology, ProRenew Complex CLRTM 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)

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

Additionally, SyriCalmTM is designed to give effective support

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.

Dosage: 3.0% pH range: 3.0–8.0

INCI Name:

in vivo

✓ skin

Water, Phragmites Communis Extract, Poria Cocos Extract

ex vivo

in vitro

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

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

Application

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

Vitamin F forte

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 water-soluble form. In addition, essential fatty acids in ester form are available as Vitamin F Ethyl Ester CLR and Vitamin F Glyceryl Ester CLR.

in vivo ex vivo in vitro ☑ skin ☑ hair □

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.

Application

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

Modukine™

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 processes in the skin at a cellular level and helps to restore skin barrier and normal skin functionality.

in vivo ex vivo in vitro ☑ skin □ ☑

Dosage: 0.5% pH range: 6.0–7.0

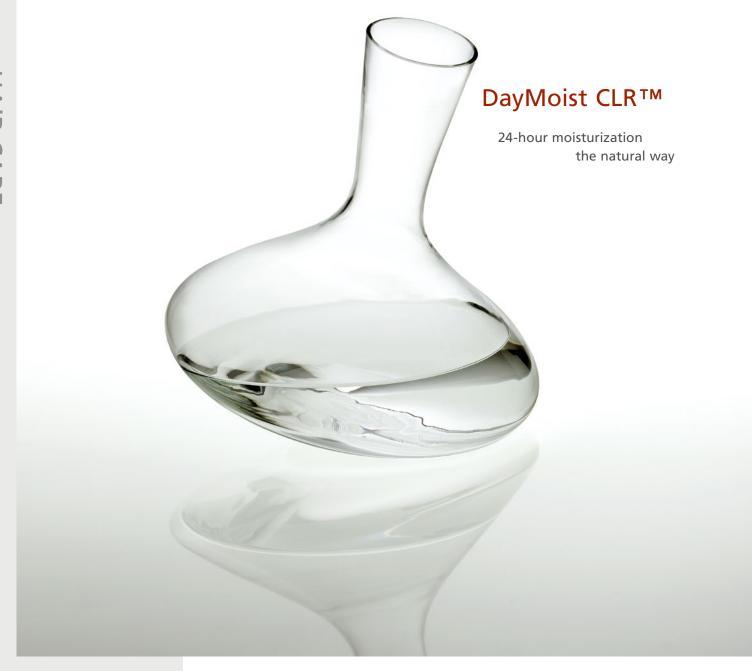
INCI Name: Lactose, Milk Protein

 $\textbf{Modukine}^{\textbf{TM}} \text{ is unpreserved.}$



Application

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



CutiBiome CLR™

Application

anti-acne

soothing, calming, anti-stress CutiBiome CLRTM 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.

in vivo ex vivo in vitro
☑ skin □ ☑

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 \checkmark



Application

- moisturizing
- hair conditioning and protection

MultiMoist CLR™ binds water in the cortex of hair, improving a variety of important hair qualities. 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.

Dosage: 1.0% pH range: 3.0-8.0

INCI Name:

Fructooligosaccharides, Beta Vulgaris (Beet) Root Extract, Water

MultiMoist CLR™

is unpreserved.

Follicusan™ DP



Application ■ anti-hair loss

Follicusan™ DP stimulates the functionality of the dermal papilla cells at the base of the hair follicles, thus counteracting 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 medium.

ex vivo

3.0-5.0%

in vitro

pH range: >5.8

INCI Name:

in vivo

Dosage:

Water, Alcohol Denat., Panthenyl Ethyl Ether, Milk Protein, Lactose, Inositol, Acetyl Cysteine, Acetyl Methionine, Sodium Citrate, Citric Acid

Follicusan™ DP

is preserved with phenoxyethanol and sodium dehydroacetate.

DayMoist CLR™



Application

- moisturizing
- hair conditioning and protection

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.

in vivo ex vivo in vitro ✓ skin

1.0% Dosage: pH range: 3.0-10.0

INCI Name:

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

DayMoist CLR™ is stabilized with plant-derived anisic acid.



Application

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

Vitamin F forte

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).

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 water-soluble form. In addition, essential fatty acids in ester form are available as Vitamin F Ethyl Ester CLR and Vitamin F Glyceryl Ester CLR.

in vivo ex vivo in vitro

☑ skin ☑ hair ☐

Dosage: 1.0% pH range: 3.0–10.0

INCI Name:

Linoleic Acid, Linolenic Acid

Vitamin F forte

is stabilized with a natural tocopherol concentrate.

Other active ingredients for hair care: Hygroplex™ HHG (p. 10)

Discover CLR WEBSITE



Find the CLR active ingredients fitting best for your demands by filters on functionality, concept or certification. Find additional information, such as innovative formulations with CLR products: https://www.clr-berlin.com/products



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CLR

Chemisches Laboratorium Dr. Kurt Richter GmbH Sperenberger Straße 3 · 12277 Berlin · Germany Tel +49 30 851026-0 · Fax +49 30 851026-85 info@clr-berlin.com · www.clr-berlin.com