



SEA MOIST COMPLEX®

*

Fights back against **dry skin**

by

replenishing depleted moisture



Dry skin is one of the most common skin problem that can occur under a variety of conditions *e.g.* pollution, harsh environmental changes.

When skin becomes dehydrated, that results from lack of water in the outer layer of the *stratum corneum*. Skin loses its moisture and flexibility. It may appear cracked and scaly.

SEA MOIST COMPLEX® brings effective moisture and repair of dry skin *via* performance strategy.

SEA MOIST COMPLEX® (SMC) is a synergistic association of natural osmotically active ingredients. Each one complements one another in sustaining moisture.

- Glycerin, quality natural Codex retains moisture loss and attracts water back into the skin from the environment.
- A seaweed extract from the red macroalga *Kappaphycus alvarezii* provides bioprotective oligosaccharides after modification through hydrolysis.
- Seawater contains minerals essential for the regulation of skin barrier homeostasis and the maintenance of healthy skin and hair.

SEA MOIST COMPLEX® offers high amounts in sodium (4980 ppm*) and potassium (1540 ppm*) that enhance hydration and exchanges between cells. Magnesium (1650 ppm*) helps produce energy to cells. Calcium (90 ppm*) improves *stratum corneum* cell cohesion.

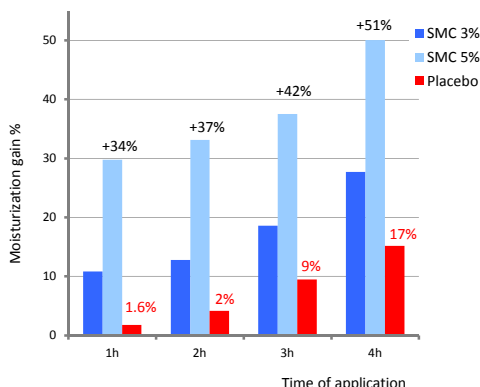
* data from a control batch.

Mechanisms of action

SEA MOIST COMPLEX® improves hydration in dry skin

Clinical studies

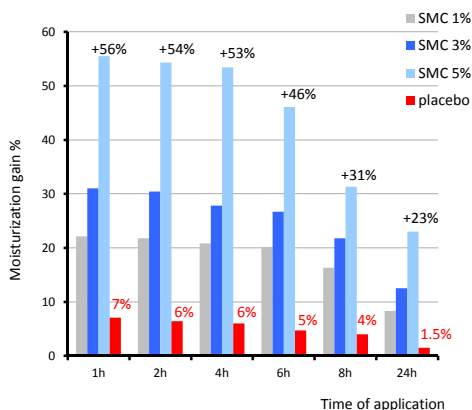
Eight volunteers with dry or very dry skin. Application of creams or gels containing SMC or corresponding placebo under controlled conditions (single application of 0.2ml on an area of 35 cm²). Moisturizing efficacy of SMC evaluated by corneometry. Statistical validation (Wilcoxon test).



Immediate moisturizing effect

A cream containing 3% or 5% SMC provides rapid skin hydration compared to the placebo.

After 4h application, the epidermal moisturizing gain increases by 13% vs placebo with 3% SMC and by 35% vs placebo with 5%.



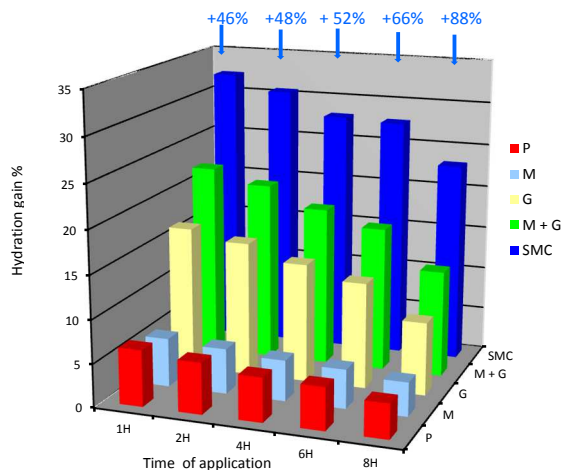
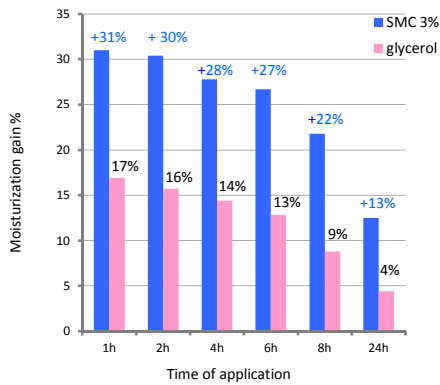
24h moisturizing effect

The gel containing SMC significantly increases skin hydration over a 24h period, compared to the placebo.

The moisturizing gain of a gel with 3% SMC reaches +18% vs placebo after 8h application and +11% vs placebo after 24h application.

A single application of SEA MOIST COMPLEX® provides high level of hydration.

SEA MOIST COMPLEX® guarantees excellent hydration ratio all day long.



Hydration comparison

The gel containing 3% SMC offers skin hydration superior to the gel containing the same quantity of glycerin alone.

Effect of synergy

Gels comparisons supplemented with either 3% SMC, or the same quantity of glycerin G or else the same quantity of marine part M (algae extract + sea water) than those included in SMC and the corresponding placebo P.

SEA MOIST COMPLEX® increases the efficacy by more than 52% after 4h application and more than 88% after 8h application (a period equivalent to a working day) vs placebo.

Glycerin is known as excellent humectant.

Associated with the marine fraction of SMC, glycerin induces a synergistic effect for reinforcing hydration properties.

SEA MOIST COMPLEX® ameliorates the epidermal functions of dry skin

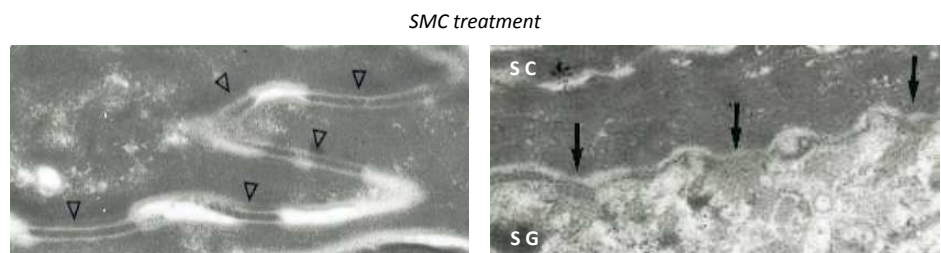
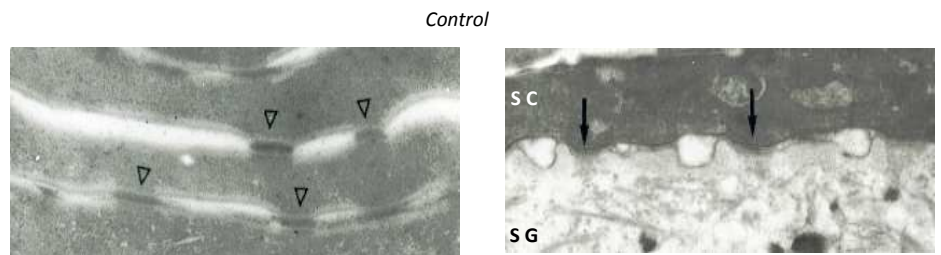
Human dry skin explants treated for 12h with 3% SMC in PBS, compared to untreated control (in PBS only). Observations by transmission electron microscopy.

Hydration of the *stratum corneum* depends on multiple factors. Desmosomes are responsible for cellular cohesion. Lamellar bodies are the source of the precursors of the final lipid content of the *stratum corneum* barrier.

The untreated skin exhibits small desmosomes (∇) and lamellar bodies (↓).

The treatment with SEA MOIST COMPLEX® enlarges desmosomes (∇), what enhances the structural integrity of the *stratum corneum* SC.

Moreover, it increases the secretion of lamellar bodies (↓) at the interface between the *stratum granulosum* SG and the *stratum corneum* SC, thus ameliorates the epidermal biosynthetic functions.



SEA MOIST COMPLEX® relieves skin dryness.

SEA MOIST COMPLEX®

Synergistic marine complex for dry skin hydration



Algal source

Kappaphycus alvarezii is a red macroalga that takes its origin from Malaysia (Sabah). It is intensely cultivated in Philippines and surrounding countries for the manufacture of kappa-carrageenan.

The specific name "*alvarezii*" as applied to *Kappaphycus alvarezii* by the famous American Phycologist Maxwell S. Doty commemorates Vicente B. Alvarez, a pioneer in the cultivation methods of *Eucheuma* in the Philippines.

This alga is known as various common names: "Agal agal", "Chilin-t'sai", "Cottonii", "Eucheuman", "Guso", "Kirinsai".

Cosmetic benefits

The strategy of SEA MOIST COMPLEX® is based on a synergistic association of natural osmotically active ingredients: glycerin (plant origin) and a seaweed extract supplemented with seawater. The moisturizing action of glycerin is potentiated by the marine fraction.

SEA MOIST COMPLEX® acts as an extremely potent moisturizer for dry skin. It provides the skin with its ideal level of moisture and nutritive minerals for up 24 hours. It helps maintain the hydration state of the skin all day long and regulate the skin homeostasis.

SEA MOIST COMPLEX® reduces dehydration by improving the structural integrity of the *stratum corneum* and the epidermal biosynthetic functions of dry skin.

As results the skin appears smoother with healthy appearance and feeling.

Cosmetic applications

Daily and evening skin care - Body care - Protective care for dry and sensitive skin, make-up foundations and dry scalp treatments - Toiletries and shampoos.

Recommended use levels: 1% - 5%.

Characteristics

INCI names	Glycerin	CAS n° 56-81-5	EINECS n° 200-289-5
	Water	CAS n° 7732-18-5	EINECS n° 231-791-2
	<i>Kappaphycus alvarezii</i> extract		
	Sea water		

Limpid liquid transparent to yellow colored.

Preservatives by selection: microcare SB or phenoxyethanol.

Packing size: 1kg – 5kg -10kg.



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