

Phytocare-HATM

Pure, Cosmetic Grade
Snow Mushroom Extract



Create Possibilities

Pc

Phytocare-HA™

Snow Mushroom Extract



Powerful, Natural Hydration with a Rich Ancient History

PhytoCare-HA™ is the extracted essence of the tremella fuciformis sporocarp mushroom, otherwise known to the Chinese as “Silver Ear” or Snow Mushrooms. It has played a prominent role in Chinese history as a celebrated ingredient in herbal, cosmetic, and culinary applications, believing that it helped reduce age spots and wrinkles on the skin. Yang Gui Fei, Concubine of Tang Dynasty Emperor Hsuan-Tsung, is considered to be the most beautiful woman in China's storied history. It is said that she ingested Snow mushrooms and used it for both facial and body washes to preserve the storied glow of her alabaster skin.

🍏 100% Clean and Natural

Approved by Cosmos and Ecocert.

🍏 Incredible Moisture Retention

Holds up to 500 times its own weight in water, providing benefits similar to that of hyaluronic acid but from a cleaner, more natural source.

🍏 High Quality, Cosmetic Grade Extract

Produced in a HACCP, ISO 9001 and ISO 22000 Certified agricultural plant, combining modern quality control processes with traditional organic growing methods.

🍏 Patented Extraction Methodology

Unique preparation method ensures active heteropolysaccharides are extracted in their purest form, untouched by pesticide residues or harsh solvents.



Features & Benefits

A Partnership Between Nature and Science

In 2001, scientists at Shanghai Huiwen Biotech began a systematic scientific investigation into the Snow Mushroom. They were experts in their respective fields with diverse backgrounds in plant cell physiology, plant and pharmaceutical chemistry, Chinese traditional medicine, and botanical science. They were able to identify the key actives and molecular structure of the Snow Mushroom, conducting systematic in-vitro and in-vivo clinical studies to verify both its benefits and safety.



Restore Natural Skin Vitality

- 🍏 Holds 500 times its own weight in water.
- 🍏 Clinically proven to improve skin hydration over time.
- 🍏 Clinically proven to boost stratum corneum's capacity to hold water.



"Second Skin" Hydration Barrier

- 🍏 ***Creates stronger, more flexible film vs. hyaluronic acid.***
- 🍏 Clinically proven to reduce evaporation of water from skin.
- 🍏 Improved, non-tacky sensory.
- 🍏 Reduce exposure to environmental pollutants.



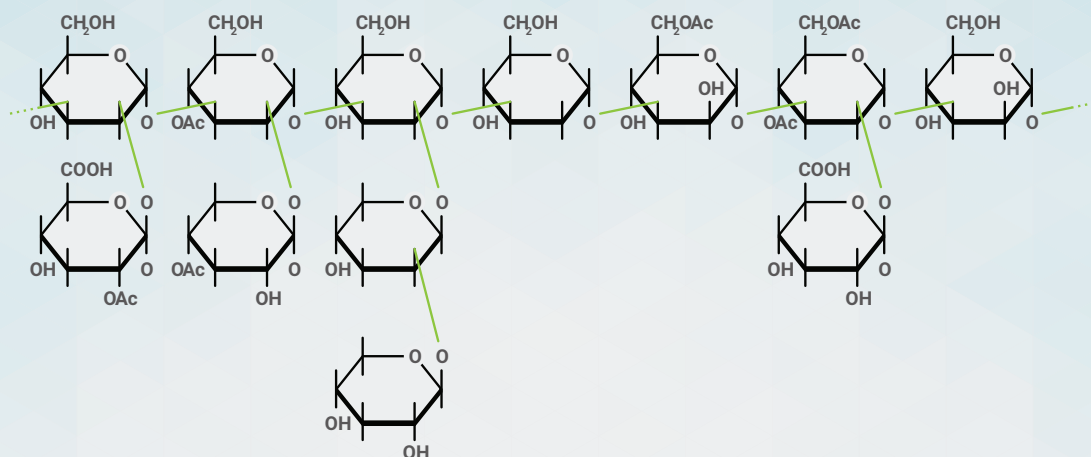
Boost Natural Antioxidant Defense

- 🍏 Stimulates production of super oxide dismutase (SOD), an enzyme naturally produced by your body to combat free radical exposure.
- 🍏 Clinically proven to reduce malodialdehyde (MDA) levels, a measure of overall oxidative stress on skin.



Panel Tested for Sensory Performance

A 0.2% solution of both Phytocare-HA and traditional hyaluronic acid was prepared for this consumer test panel. An in-vivo blind panel test was conducted with the solutions applied to either side of the face. 62% of panelists preferred the feel of the Phytocare solution over hyaluronic acid with 10% remaining neutral.




Phytocare's Complex Polysaccharide Molecular Structure

Much like standard hyaluronic acid, Phytocare-HA holds up to 500 times its own weight of water, creating a natural flexible hydration film on skin. The main difference between Phytocare and hyaluronic acid is the snow mushroom features a longer, more robust chain comprised of 1,3-mannose sugar monomer, along with many short branches or side chains of xylose and glucuronic acid.

The differences in molecular composition allow Phytocare to create a more flexible hydration film with stronger integrity, while also being easier to dissolve into water. Phytocare is dramatically more tolerant to changes in pH, temperature, and salt content, making it easier to use in formulations.

Product INCI and Applications

TRADE NAME	INCI
 Phytocare-HA CG 1M	Tremella Fuciformis Sporocarp Extract

Applications

- Skin Care Products - Serums, Concentrates, Lotions, Creams
- Shampoos - Boosts Foam Height and Integrity; Conditioners - Follicle Hydration
- Botanically Focused Color Cosmetics
- Sunscreens - Film Forming and Hydration Support

Need Samples?

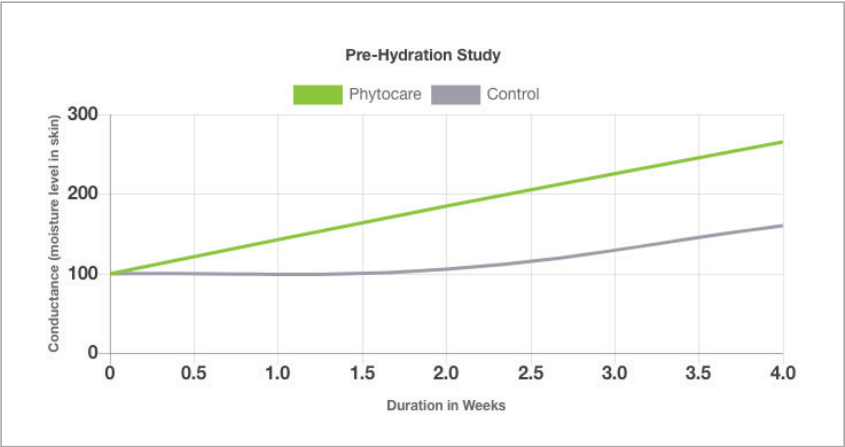
We believe sample requests should be provided generously. We understand trying, testing, and evaluating our ingredients and intermediates are all critical to your research, development, and production processes. So go ahead, ask and you shall receive.

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Clinical Studies

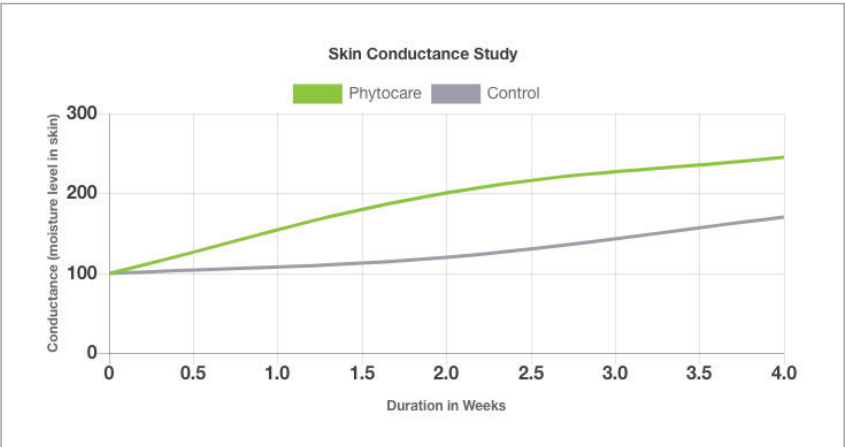
All tests were conducted using a 13 subject in-vivo testing protocol using skin conductance instrumentation to measure hydration levels of a period of 4 weeks. Subjects were treated with two aqueous solutions, one containing 0.2% Phytocare and a control containing 0.2% standard HA, applied twice per day.

The Results vs. Hyaluronic Acid



Pre-Hydration Study

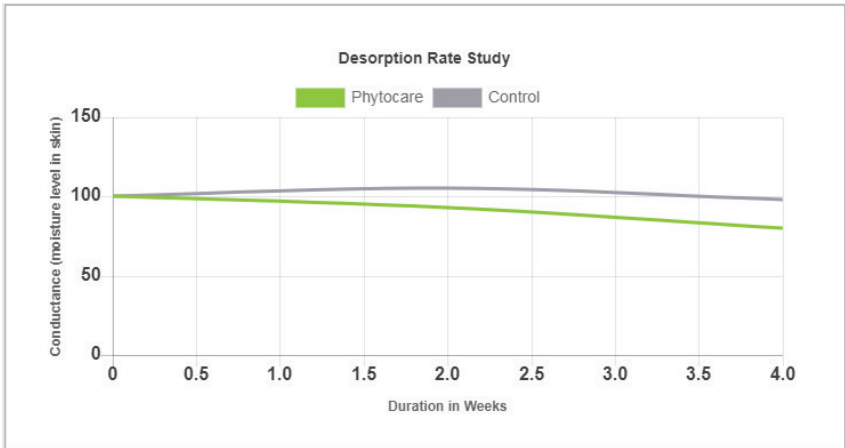
A 4 week clinical study measuring the stratum corneum's hydration state over time. Phytocare is an extremely powerful water retention active, providing cumulative, long lasting hydration replenishment to damaged skin, restoring the skin's natural vitality and ability to resist environmental stressors. This particular study shows that the hydration level of skin treated with Phytocare increased 2.6 times over the course of four weeks.



Skin Conductance Study

This clinical study measures the stratum corneum's ability to absorb and retain water over time. Treatment with Phytocare demonstrates that the stratum corneum's capacity for retaining water was increased over a period of 4 weeks.

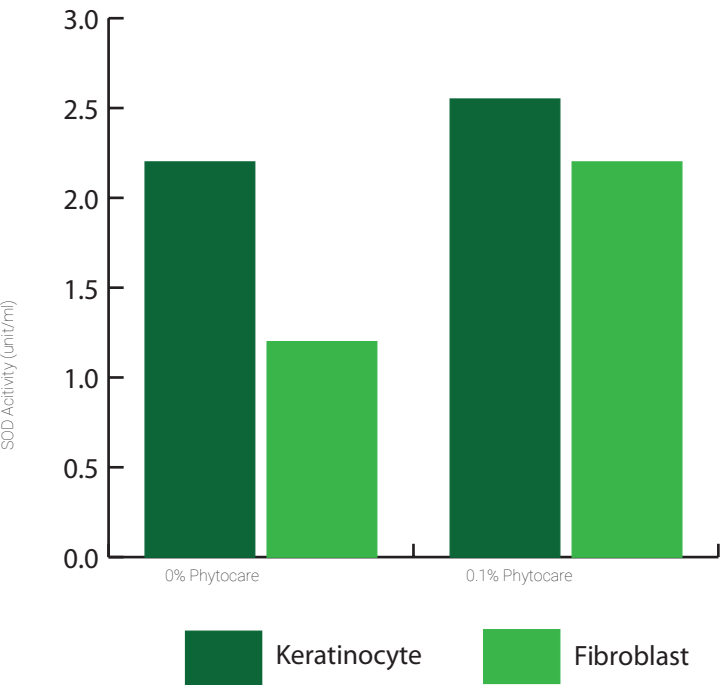
In other words, Phytocare helps to boost your skin's ability to remain healthy, strong, and supple over time.



Desorption Rate Study

This desorption study measures the overall strength of the stratum corneum's barrier function, and its ability to keep water from evaporating out. Phytocare significantly lowers the desorption rate, signifying a stronger, healthier skin barrier.

Boosting Natural Defenses



Super Oxide Dismutase (SOD) Comparison

In-vitro study conducted to measure the level of antioxidant production post-treatment with 0.1% Phytocare™ solution.

Phytocare™ solution was added to fibroblast and keratinocyte skin cell cultures, then cultivated for 24 hours.

Study showed a clear improvement in SOD enzyme activity post-treatment.

Phytocare™ naturally boosts your body's biological defense against oxidative stress, rather than affecting a direct chemical change in free radical molecules. Phytocare™ helps combat damaging environmental pollutants by stimulating enzymatic production of super oxide dismutase, the body's natural antioxidant defense against free radical molecules.

Clean Sourcing, Safety Focused

TEST NAME	RESULTS
Eye Irritation Test	Passed
Acute Oral Toxicity	LD50 > 5000 mg/kg
14-Day Continous Skin Irritation Test	Passed
AMES Test	Passed
Chronic Toxicity Test	Passed
RIPT Irritation Test	Passed
Pesticide Residue Test (434 Chemicals)	Passed (conducted annually)

Stringent Safety Testing

While snow mushrooms can be found in specialty Asian stores within the United States, the growing and extraction methods used to produce Phytocare helps ensure the extract is safe and suitable for cosmetic use.

The snow mushroom used in the Phytocare extraction process is sourced from clean organic farming techniques, is not genetically modified, and is tested annually for over 400 pesticides in an accredited independent Japanese laboratory.

Phytocare has also passed a significant battery of safety tests, ensuring that the final product is the safest, purest form of snow mushroom essence.

Formulations

Snow Kiss Hydration Concentrate

This luxuriously silky concentrate imparts a light, cooling sensation post application while creating a strong, continuously hydrating skin barrier.

PHYTOCARE is a magical hydration powerhouse active, forming a moisture-restoring flexible film to hydrate and repair the skin thus rebuilding skin elasticity.

SENSOGEL, a sensorial rheology modifier that provides a surprisingly non-tacky, "super-fresh" sensory with a quick-absorbing feature. The strong thickening power of Sensogel can be a wax substitute in high-viscosity creams.

Processing

1. Mix Phase A homogenous with a propeller (below 50°C), then mix into phase B at room temperature at 500 rpm.
2. Add Phase C into main phase and mix at 2000 rpm for 15 mins.
3. Add Phase D and add loss water, mixing until homogenous.

PHASE	INCI NAME (TRADE NAME)	WT%
A	Snow Mushroom Extract (PhytoCare-HA CG 1M)	0.40
	Dipropylene Glycol	7.00
B	Water	87.3
	Sorbitol	1.50
C	Sensogel 200	3.00
D	Preservative	0.30
	Frescolat® MGA Plus	0.20
	Dragosantol 100	0.30
	Fragrance	q.s.



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Phytocare

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Applechem was founded in 2003 by Dr. Samuel Lin in a tiny laboratory within a tech incubation center in northern New Jersey. Yet even after transitioning from a one-man startup to a stable, global supplier, we've never forgotten our roots as a small, spirited business with big ideas.

We recognize that every personal connection should be valued and validated with responsive customer service coupled with strong technical aptitude. Moreover, we promise to continue expanding the range of possibilities in the formulation space, creating functionality where none existed before and putting an improved spin on traditional ingredient technologies.

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