AC Marine Collagen PF
Hydration + Conditioning

Tomorrow’s Vision... *Today!*®
AC Marine Collagen PF

Technical Information:

**Product Code:** 20739

**INCI Name:** Soluble Collagen

**INCI Status:** Conforms

**Suggested Use Levels:** 1.0 – 10.0%

**Suggested Applications:** Hydration, Conditioning
Collagen has become the topic of daily conversation!

- Improving the skin and lips natural collagen structure
- Introducing new collagen through invasive injections

**AC Marine Collagen PF** consists of:

- Fish derived soluble collagen
- Excellent hydrating properties
- Film forming benefits in a safe, reliable manner
Collagen is created by fibroblasts, specialized cells found in the dermal layer of the skin.

Fibroblasts are responsible for the production of collagen, elastin, and fibronectin that act as the structural support beams within the skin.

Fibroblasts synthesize collagen within the cell and release it through exocytosis:
- A process by which molecules diffuse through the cell membrane.

Once outside the cell, the collagen molecules will self-assemble, creating the same structures found in skin.
AC Marine Collagen PF

Benefits

• Restore one’s youthful appearance by hydrating the skin and helping to increase its natural collagen production

• Can be easily incorporated into the water phase

• Can be used in a wide variety of personal care formulas

• Marine collagen is capitalizing on what is arguably the most profound trend in cosmetics in the last decade
Improvements in Hydration

**AC Marine Collagen PF**

**Figure 1.** Percent improvement in hydration following application of AC Marine Collagen PF.

**Protocol**
- 2 week study with 10 M/F
- Concentration: 5.0%
- Applied on volar forearms twice daily
- Improved skin hydration by 12%
- Enhance hydration levels for both skin and scalp care
AC Marine Collagen PF

Moisturization Assay

Figure 2. Percent increase in moisturization following application of AC Marine Collagen PF.

Protocol

- AC Marine Collagen PF is capable of increasing stratum corneum moisturization values after 1 hour
- AC Marine Collagen PF may be added to anhydrous systems to effectively increase epidermal moisture
AC Marine Collagen PF

**Improvements in Compatibility**

**Protocol**
- Concentration: 5.0%
- Increased the sensorial perception of wet combing ease by 90.0%
- Participants rated the control as increasing combability by 40.0% and the test material as increasing dry combability by 50.0%
- Useful for preventing damage and breakage which typically results from excessive combing forces during styling

![Figure 3. Percent change in Combability.](image-url)
ORAC Assay

ROAC Assay

AC Marine Collagen PF

Protocol

- AC Marine Collagen PF exhibited antioxidant activity comparable to 100μM Trolox®

- AC Marine Collagen PF increased as the concentration increased, as a result we can assure that its ability to minimize oxidative stress is dose dependent

- Ingredient is not only capable of providing functional benefits but it is also capable of providing potent antioxidant benefits when added to cosmetic applications

Figure 4. Antioxidant capacities.
Human dermal fibroblasts were seeded into 24-well tissue culture plates.

AA2G and IGF-1 were used as positive controls.

Concentrations: 1.0%, 0.1%, 0.01%

AC Marine Collagen PF exhibited positive collagen synthesis activity.

The increase in collagen production may lead to improvement in the dermal-epidermal junction integrity as well as an improved scaffolding matrix.

**Protocol**

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**Figure 5.** Collagen and non-collagen protein concentrations.

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**Figure 5.** Collagen and non-collagen protein concentrations.
**AC Marine Collagen PF**

**Sirius Red Fast Green Report**

![Graph showing percent collagen compared to non-collagen proteins.](image)

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**Figure 6.** Percent collagen compared to non-collagen proteins.
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THANK YOU

Please visit and register to use our new website at
www.activeconceptsllc.com
When you register, you will have access to the complete product
documentation available.