# ACB Bamboo Isoflavones PF

great for hair & skincare

Lactobacillus sustainability

natural silicone replacement

antioxidant + aesthetics

anti-aging

**Code Number: 20433PF**

**INCI Name**: Lactobacillus/Arundinaria gigantea Leaf Ferment Filtrate
**INCI Status**: Conforms
**REACH Status**: Complies
**CAS Number**: N/A
**EINECS Number**: N/A

**Origin**: Botanical
**Processing**:
GMO Free
No Ethoxylation
No Irradiation
No Sulphonation
**Additives:**
Preservatives: None
Antioxidants: None
Other additives: None
**Solvents Used**: N/A
**Appearance**: Slightly Viscous, Orange/Brown Liquid
**Soluble/ Miscible**: Water Soluble
**Ecological Information**:
87.25% Biodegradability
**Microbial Count**: <100 CFU/g, No Pathogens

**Suggested Use Levels**: 1.0 – 10.0%
**Suggested Applications**:
Antioxidant, Increase Fibroblast Proliferation, Improve Slip and Aesthetics

## BACKGROUND

Bamboo is a natural, sustainable raw material with various benefits. *Arundinaria gigantea*, or giant bamboo, is native to the United States and is a fast-growing renewable resource. Not only is bamboo a rich source of natural silica, but it also contains isoflavones that impart powerful antioxidant activity to protect the skin and hair. In order to enhance the extraction of the active components from this plant, we utilized biofermentation techniques to create a multifaceted product.

**ACB Bamboo Isoflavones PF** can increase epidermal slip by more than 60%, deliver strong antioxidant benefits to protect the skin and stimulate cellular proliferation for younger looking skin.

## SCIENCE

Due to our environmental stance and continual focus on sustainability, Active Concepts developed an innovative bamboo-derived product. **ACB Bamboo Isoflavones PF** is produced by macerating bamboo stalks and leaves and then fermenting them with Lactic Acid Bacteria (LAB). This forms a bio-silicate with the silica, from the plants matrix. We then isolate the powerful antioxidants, without the use of harsh chemicals, to provide a product containing bio-chelated silica and isoflavones. **ACB Bamboo Isoflavones PF** provides both a resilient slip and powerful anti-aging properties, useful for a variety of skin and haircare applications.

Benefits of **ACB Bamboo Isoflavones PF:**

- Antioxidant
- Improves Slip & Aesthetics
- Natural Silicone Replacement

# ACB Bamboo Isoflavones PF

## BENEFITS

**ACB Bamboo Isoflavones PF** coincides perfectly with consumer trends, particularly the demand for a more healthy and more balanced lifestyle. This natural silicone replacement is suitable for a variety of applications, such as lotions, creams, shampoos, conditioners, leave-in treatments and make up. **ACB Bamboo Isoflavones PF** functions as an all-around anti-aging ingredient while also improving the aesthetics of formulations.

## EFFICACY

A twenty subject sensory panel was assembled to determine the *in-vivo* improvement in epidermal slip using **ACB Bamboo Isoflavones PF**. Panelists were asked to compare the improvement in slip using **ACB Bamboo Isoflavones PF** to a biological control. A 10% concentration of **ACB Bamboo Isoflavones PF** was prepared in a standard aqueous solution; a 50µl dose was then applied to the subjects' left hand. The results demonstrate that **ACB Bamboo Isoflavones PF** increases epidermal slip by more than 60% when compared to the biological control.

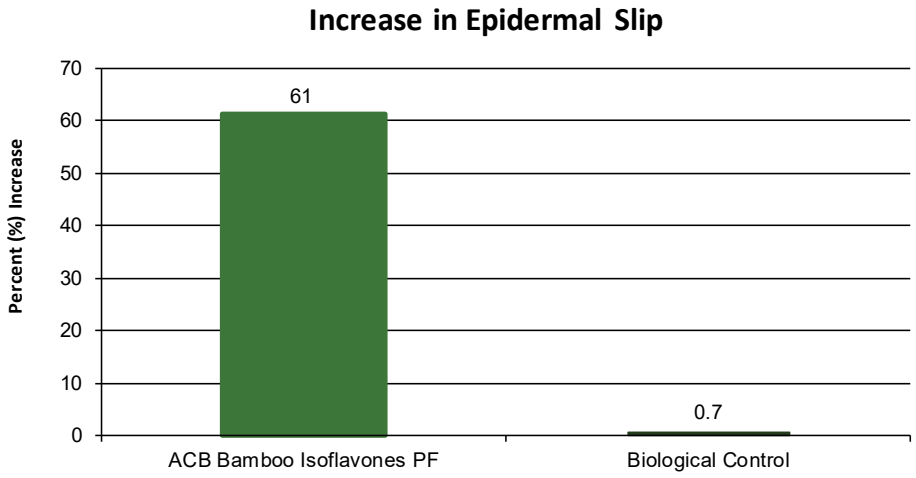


**Figure 1.** Increase in epidermal slip following application of **ACB Bamboo Isoflavones PF.**

The oxygen radical absorbance capacity (ORAC) assay is a standard method used to assess antioxidant capacity of physiological fluids, foods, beverages, and natural products. The assay quantitatively measures a sample's ability to quench free radicals that have the potential to react with and damage cellular components. The antioxidant capacity of **ACB Bamboo Isoflavones PF** increased as the concentration increased, as a result we can assure that its ability to minimize oxidative stress is dose dependent.

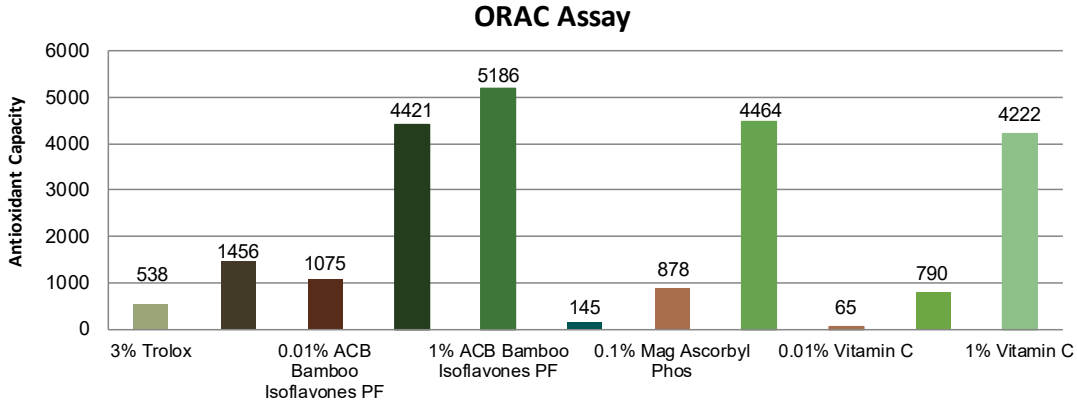


**Figure 2.** Results of the antioxidant capacity of test materials

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An MTT assay was also performed to assess the ability of **ACB Bamboo Isoflavones PF** to stimulate cell proliferation. Again, 1.0% **ACB Bamboo Isoflavones PF** performed almost as well as the positive control (fibroblast growth medium) in cell proliferation stimulation.

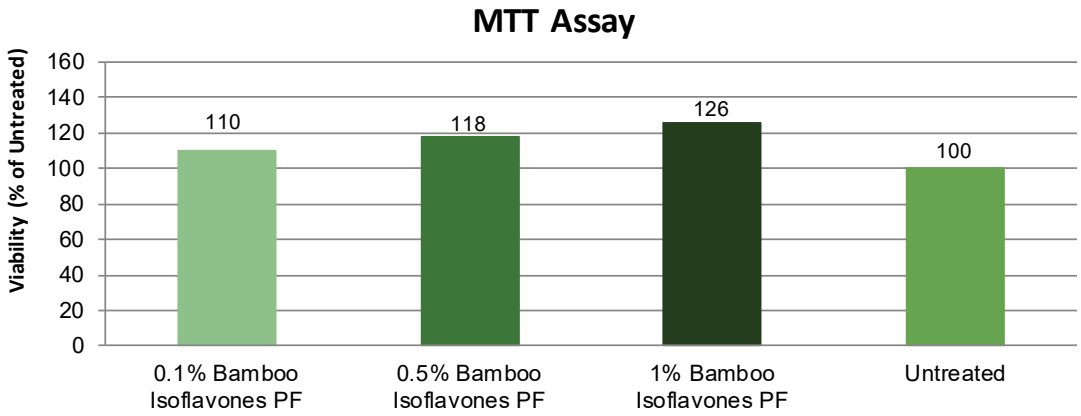


**Figure 3.** Improvements in fibroblast proliferation following application of **ACB Bamboo Isoflavones PF.**

**ACB Bamboo Isoflavones PF** coincides perfectly with consumer trends, particularly the demand for a healthier and balanced lifestyle. This natural silicone replacement is suitable for a variety of applications, such as lotions, creams, shampoos, conditioners, leave-in treatments and make up. **ACB Bamboo Isoflavones PF** functions as an all-around anti-aging ingredient while also improving the aesthetics of formulations.

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