ABS Acai Sterols EFA
Natural + Sustainable + Protectant

Tomorrow’s Vision... Today!®
ABS Acai Sterols EFA

Technical Information:

Product Code: 10414

INCI Name: Euterpe Oleracea Sterols

INCI Status: Conforms

Suggested Use Levels: 0.5 – 5.0%

Suggested Applications: Barrier formation, moisturization
Açaí

More than a Trend

- Known as the “tree of life” by Brazilians who have utilized the nutrient rich berry for centuries
- Has the highest Oxygen Radical Absorbance Capacity (ORAC) among all fruits and vegetables

Mintel: “Botanicals from the [Amazon] region are linked to wellness and natural functionality, with exotic fruits such as acai...continuing their rise to fame due to their anti-aging benefits and link to their ‘Superfoods’ concept”

Reference:
More on Açaí

Holistic Uses:

- Oil - tuberculosis
- Seeds - fever
- Root - jaundice, anemia, diabetes, hepatitis, & malaria
- Fruit rind - skin ulcers

Nutritional Value:

- Fiber
- Anthocyanins
- Phytosterols (e.g. β-sitosterol)
- Fatty Acids
  - Oleic
  - Palmitic
  - Linoleic

References:
1) Ezinearticles.com The Acai Berry and Its Nutrient Value [Retrieved: December 27, 2010]
More on Fatty Acids

Linolenic Acid (ω-3 fatty acid)
Essential Fatty Acid
Understood to have anti-inflammatory benefits
Typically recommended for treating arthritis & improving cardiac health

Linoleic Acid (ω-6 fatty acid)
Essential Fatty Acid
Linked to reducing eczema
Symptoms of deficiency include: dry hair, hair loss & poor wound healing

Oleic Acid
Typically derived from olive & grape seed oils
Excipient in pharmaceuticals
Also useful as emulsifier & conditioning agent
Contemporary Research

Results indicate:

- Enhances circulation
- Reduces hyperpigmentation
- Limits oxidative damage
- Provides anti-inflammatory benefits
- Enhances longevity
- Exhibits anti-cancer properties

References:
Benefits

- Effectively moisturizes skin
- Enhances barrier function
- Creates exceptional gloss
- Capitalizes on acai trend
Sustainability

We insist on eco-friendly suppliers who work with:

- World Wildlife Fund
- The Nature Conservancy
- Brazilian NGO Peabiru Institute

Acai palm tree is a renewable resource

- multi-stems coming from same root system (clump)
- Entire palm not killed – after harvest, a new stem is generated from clump
ABS Acai Sterols EFA
Efficacy Assay Results

Protocol

• British Pharmacopoeia Water Absorption Capacity Method

• Water is dripped into a product sample

• Mixed at room temperature with a mortar and pestle until terminal point is reached

• Terminal point is defined as the point at which no more water can be mixed into a solution

• Water Holding Capability (%) = (Amount of Water Contained/ Sample Weight) * 100

Graph 1. ABS Acai Sterols EFA is capable of holding more than double its weight in water and therefore will effectively hydrate the skin
Epidermal hydration changes are often quantified by measuring changes in electrical conductance of the stratum corneum via impedance measurements.

A DPM 9003 NOVA Impedance meter was used to observe improvements in moisturization following treatment with ABS Acai Sterols EFA.

A panel of 10 male and female subjects between the ages of 22 and 41 was assembled to determine the moisturizing improvements of ABS Acai Sterols EFA over the course of a 28-day study.

Graph 2. ABS Acai Sterols EFA was able to increase hydration results over the course of a 21 day study.
ABS Acai Sterols EFA Efficacy Assay Results

Protocol Cont.

- 5.0% ABS Acai Sterols EFA was incorporated into a lotion which was used as the test vehicle, the same lotion without ABS Acai Sterols EFA was used as the control.

- Initial moisturization measurements were taken of the subjects' forearm prior to applying either lotion. Repeat measurements were then taken weekly until the study was completed. Results for both the control and test treatment were compared to the initial impedance values that were taken on day 0.

Comparative Changes in Moisturization Properties
ABS Acai Sterols EFA Efficacy Assay Results

**Protocol**

- Mixture of sample and mineral oil applied to filter paper
- Filter paper placed on top of a cup containing CaCl$_2$ solution
- Conditions:
  - Time = 24 hours
  - Temperature = 25$^\circ$C
  - Relative Humidity = 95%
- The weight of the moisture permeated through the filter paper was measured as increased weight
- Coefficient of Permeability is a percentage comparing weight increase with a control to which no oils were applied
- Inverse relationship between coefficient of permeability and barrier function

**Barrier Function: Coefficient of Permeability**

Graph 4. Coefficient of permeability demonstrates that ABS Acai Sterols EFA is more effective in enhancing the skin’s barrier function.
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THANK YOU
For more information –Visit our website!
www.activeconceptsllc.com