

PAE Complex® Skin Revitalizer

Ingredient Information

INCI Name: Aloe Barbadensis Leaf Juice (and) Phytic Acid
(and) Ascorbyl Methylsilanol Pectinate
CAS# 94349-62-9, 83-86-3, 227200-22-8
EINECS# 305-181-2, 201-506-6, 219-489-9/200-066-2/232-553-0

Specifications

Color Clear to dark yellow (9 Max)
Appearance Clear liquid
pH (as is) 4.0 – 5.0

Recommended use levels 10 – 13.3%

Attributes

- Exfoliating properties for skin
- Provides skin firming
- Improves skin tone
- Reduces inflammation and irritation
- Moisturizes skin
- Provides chelating efficacy
- Easy to use in formulations

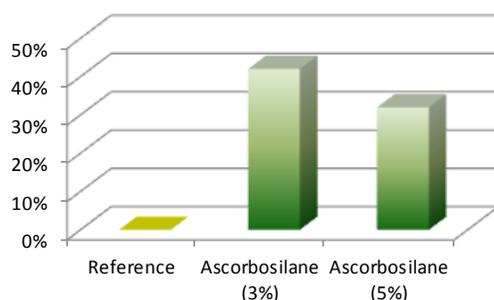
Applications

- Skin care

PAE Complex® Skin Revitalizer is a water soluble complex that provides numerous key attributes for use in skin applications. PAE Complex® Skin Revitalizer is easily added to formulations without the additional step of neutralization. Thanks to the properties of its ingredients, PAE Complex® Skin Revitalizer will exfoliate, moisturize, and soothe the skin allowing the active ingredient to penetrate more evenly and deeply to increase its efficacy.

PAE Complex® Skin Revitalizer includes the innovative active, ASCORBOSILANE®. This active is a Silanol that optimizes the cosmetic properties of Silicon and Ascorbic Acid for unique bioavailable skin benefits. Vitamin C is a long-established skincare superstar that can help you achieve younger, healthier and more radiant skin. As a Vitamin C derivative, Ascorbic Acid can provide the benefits of vitamin C without the lack of stability and irritation. ASCORBOSILANE® offers global protection of the cutaneous cells during a free-radical attack by strengthening the cell membrane and scavenging free radicals. ASCORBOSILANE® also inhibits melanogenesis to provide a brighter and more uniform skin tone.

Melanogenesis Inhibition



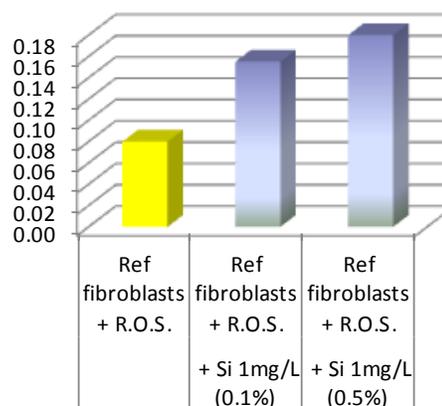
SKIN TONE RADIANCE ACTIVITY

Ascorbic Acid acts on melanogenesis as a tyrosinase inhibitor. A dose of 3% of Ascorbosilane generates an inhibition of approximately 40% of melanogenesis.

SCAVENGING EFFECT

Vectorized by the silanol structure, Ascorbosilane displays an optimized scavenging action on free radicals.

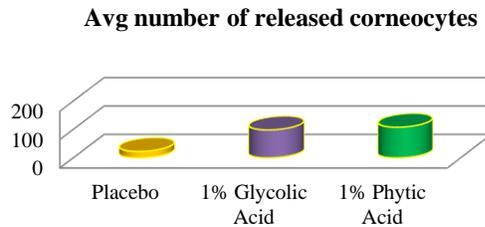
Index of cell viability



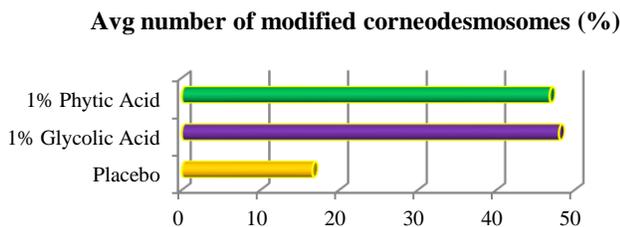
PAE Complex® Skin Revitalizer contains Phytic Acid Extreme to enhance the delivery of the ASCORBOSILANE®. Phytic Acid Extreme has a unique structure which provides self-neutralizing activity that yields gentle keratolytic effects and aids in cell turnover. Proper exfoliation helps in maintaining healthy skin by removing the barrier of dead skin cells clogging the skin to uncover the fresh new cells below to provide many benefits such as the reduction of clogged pores and breakouts, increased collagen production, fine lines are softened and appear less noticeable, dryness and flakiness are greatly reduced, and skin appears smoother with a more even-toned complexion.

The efficiency of exfoliation was evaluated by the assessment of the desquamation process within the upper layers of the stratum corneum in human skin explants by counting released corneocytes.

The topical treatment with formulation containing 1% Phytic Acid significantly increased the number of released corneocytes with respect to the placebo. The effect was comparable to that of the topical treatment with formulation containing 1% Glycolic Acid.



Desquamation was also evaluated by Transmission Electron Microscopy (TEM) for modified corneodesmosomal structure. The loss of corneodesmosomes integrity allows the detachment of corneocytes. These modifications decrease corneocytes' cohesion and enhance the exfoliation process.



The topical treatment with formulation containing 1% Phytic Acid significantly increased the number of altered corneodesmosomal structures compared to the placebo. The effect was comparable to that of the topical treatment with formulation containing 1% Glycolic Acid.

With exfoliating efficacy comparable to Glycolic Acid, Phytic Acid Extreme is undoubtedly a mild alternative for skin care products and applications where harsh AHAs are not desirable.

With the addition of Aloe Vera, **PAE Complex® Skin Revitalizer** retains the therapeutic properties that have been described throughout history. Aloe Vera has known healing and soothing properties. It contains a unique combination of amino acids, vitamins, minerals and enzymes which aid in keeping skin supple and in addressing issues like acne or eczema. Aloe Vera can relieve itching, inflammation and provide moisturizing benefits. **PAE Complex® Skin Revitalizer** can be easily applied in various personal care formulations to deliver the multiple benefits of its ingredients.

Storage and Handling

Before handling please read the Material Safety Data Sheet and container label for safe use, physical and health hazard information. Optimal storage temperature is 4°C.

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