When exposed to U.V. human skin produces melanin, a natural pigment that plays the role of the first defense mechanism against these radiations and free radicals. Melanogenesis, the process of synthesizing melanin from tyrosine, is performed by specialized cells: melanocytes. With age, some melanocytes produce too much melanin, hence leading to the appearance of aged spots.

Therefore, ALBATIN (solution of aminoethylphosphinic acid, ALA-P) was designed for melanin regulation.

Contrary to current classical melanogenesis inhibitors (arbutin, kojic acid, vitamin C…), ALBATIN does not inhibit tyrosinase (the enzyme responsible for transforming tyrosine into DOPA and DOPAquinone). Instead, ALBATIN was shown to stabilize the DOPAchrome, hence preventing its later transformation into melanin.

ALBATIN is able to significantly stabilize DOPAchrome and to decrease melanin production in tanned reconstructed epidermis.

ALBATIN delivers a fast reduction of melanin density, with visible skin lightening effects.

ALBATIN also improves skin complexion and prevents dullness during the skin lightening process.

Because ALBATIN targets a step of the melanogenesis process that is downstream of standard tyrosinase inhibitors, they can be used together for a synergistic effect on melanogenesis inhibition:

- Higher melanogenesis inhibition
- Lower undesirable effects related to toxicity

The efficacy of ALBATIN may be even further improved thanks to an association with a powerful, award-winning, and large scope detoxifier, ALISTIN.

Furthermore, melanin is a natural defense mechanism, and blocking it may also lower skin protection.

When irradiated melanocytes produce melanin with a peak after 48 hours, ALBATIN decreases melanin liberation by almost 70% and performs better than standard melanogenesis inhibitors.

Designed with pharmaceutical predictive software technologies, ALBATIN offers:

- Outstanding stability in formulated products (almost 3 times longer than ascorbic acid).
- Impressive resistance against skin enzymatic degradation.

Contrary to standard tyrosinase inhibitors, ALBATIN was evidenced to stabilize DOPAchrome. This original activity explains its good tolerance. Indeed, the inhibition of tyrosinase, enzyme involved in other biological processes, results in the alteration of major biosynthesis routes (eg. catecholamines).
ALBATIN
INCI name: AMINOETHYLPHOSPHINIC ACID

COSMETIC APPLICATIONS

Skin lightening
Anti-age spots

TECHNICAL CHARACTERISTICS

ANALYTICAL COMPOSITION

I-Aminoethylphosphinic acid ........................................ 22.5%
Butanediol ................................................................. 7.5%
Water (sq) ................................................................. 100%

PHYSICO-CHEMICAL CHARACTERISTICS

Limpid to slightly opalescent, colourless to slightly yellow.
pH ≈ 4
Density at 20°C ≈ 1.1
Miscible with water, alcohol and glycols.

PRESERVATIVES

Different preservative systems are available in order to fit with your requirements. Please contact us for additional details about the available versions.

TOLERANCE AND TOXICITY STUDIES

ALBATIN does not show any toxicity, and tolerance studies show that it is perfectly tolerated.

FORMULATION

Advised doses: 0.5% - 1.5%. The use level can be lower when used in combination with tyrosinase inhibitor.
No particular formulation restriction.