

5 α AVOCUTA[®] HAIR

> INCI NAME: Butyl Avocadate

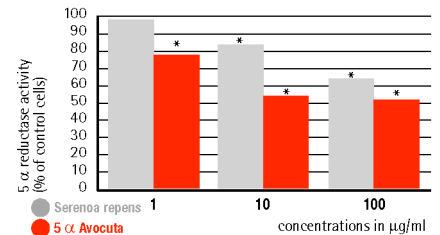
> APPLICATIONS

5 α Avocuta is an original patented active ingredient derived from avocado pears which combats the excessive sebum secretion characteristic of greasy skin and hair. Its utilisation at a dosage level of 1% is recommended in the formulation of soothing and sebum-regulating care products.

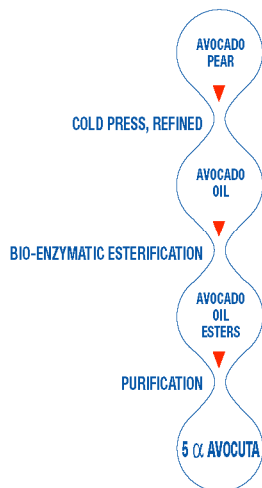
> TEST IN VITRO (human cutaneous fibroblasts)

5 α Avocuta inhibits the activity of 5 α reductase, an enzyme which metabolises testosterone into DHT, a powerful androgen that stimulates the sebaceous glands. Its effectiveness has been verified *in vitro* and provides 49% inhibition from a level of 0.01%.

* : mean significantly different from the control

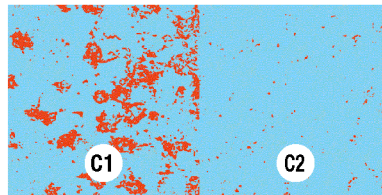


ORIGIN

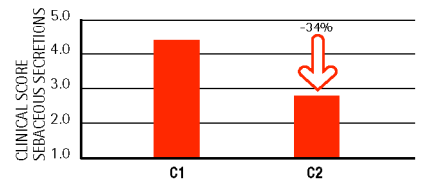


> CLINICAL EVALUATION (27 volunteers - shampoo containing 1% active ingredient - 3 theoretical weeks)

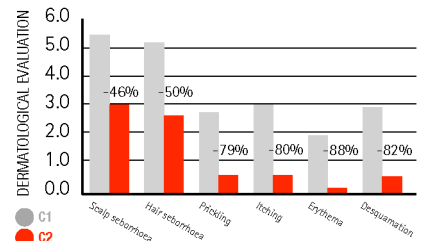
1. Sebum samples were taken before and after the treatment (applications once every other day) using a Sebifix[®] F16 patch, enabling secretion levels to be assessed. A visual examination was performed by a dermatologist (applying scores on a 1 to 5 scale) as well as a digital analysis. A reduction of 34% was recorded in this score, a mean reduction of 69% in cumulative total lipid stain surface area, thus demonstrating the reality of a sharp slowdown in the activity of the sebaceous glands.



Typical example of sebum secretion



2. Using a scoring scale of 0 to 9 and six criteria, the dermatologist assessed the condition of the volunteers' scalps before and after treatment. That condition improved sharply in all cases in terms of a reduction in greasy appearance, itching and dandruff.



3. The volunteers were able to confirm the clinical results by giving their own assessment of the effectiveness of the shampoo (% positive opinions):
 Improvement in greasy appearance of hair: _____
 Soothing effect on irritation: _____
 Reduction in dandruff: _____



> PRODUCT COMPOSITION

ASPECT _____ oily liquid with little colour and a characteristic odour
 ACID INDEX _____ <3
 PEROXIDE INDEX _____ <10
 CHROMATOGRAPHIC PURITY IN 5 α AVOCUTA _____ >95%

> TOLERANCE

THE SAFETY OF 5 α AVOCUTA HAS BEEN ASSESSED IN VITRO AND UNDER DERMATOLOGICAL CONTROL : NOT TESTED ON ANIMALS.

STORAGE: UNDER NITROGEN, AWAY FROM LIGHT, HEAT AND DAMP.
 5 α AVOCUTA IS STRICTLY AND ONLY DEDICATED TO COSMETIC APPLICATIONS (TOPIC)

EXPANSCIENCE[®]
 LABORATOIRES