



by phenbiox

# aq-save

From organic *Castanea Sativa*  
chestnut fruit

For moisturized hair  
without weighting it down

MADE IN  
ITALY



**phenbiox**

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## with AQ-SAVE healthier hair

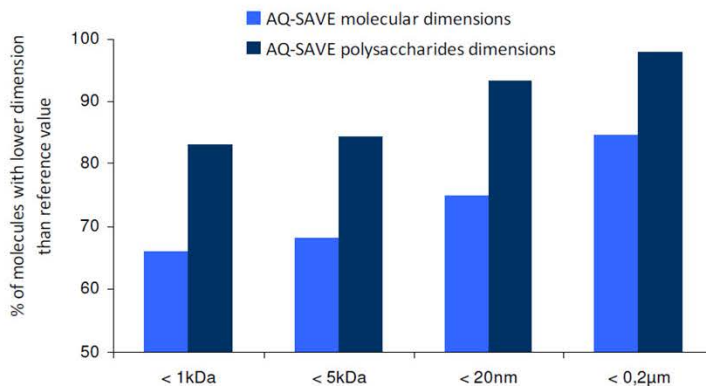
AQ-SAVE is an active ingredient developed for hair care obtained by 100% Italian organic grown *Castanea sativa* fruits (chestnut).

Dyes, bleach, iron, driers, etc. can stress hair making it weak, hampering its ability to retain water, leading to an unhealthy dry look. With AQ-SAVE this problem can be sorted out in a completely natural way without weighting hair down with greasy products

Thanks to the *patented enzymatic treatments*, *Castanea sativa* fruits are made 100% bio-available boosting the cosmetic activities provided by protein, fatty acids and short chain polysaccharides contained in chestnut.

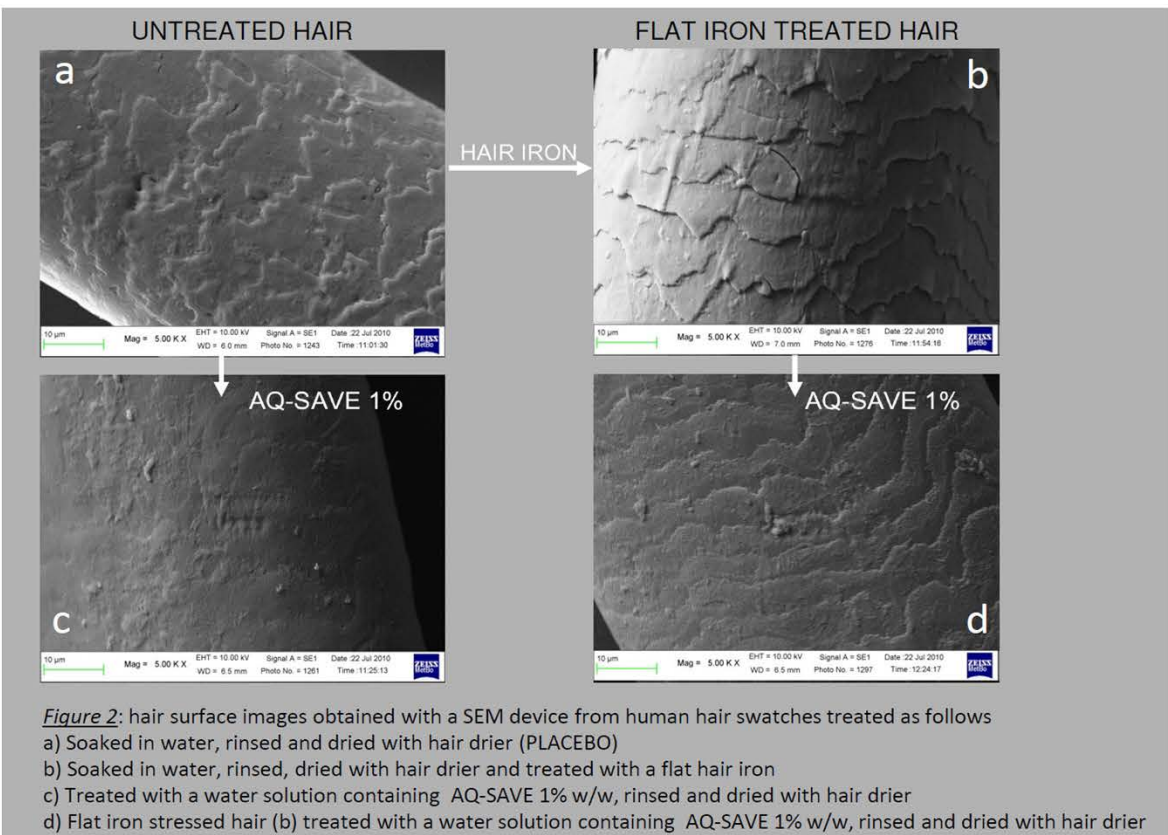
The bespoke enzymatic cuts performed on chestnuts consent to reach a dimensional distribution of molecules allowing the instauration of positive interactions with hair (Figure 1)

**Figure 1** dimensional distribution of molecules contained in AQ-SAVE



AQ-SAVE at 1% w/w in a cosmetic formulation nourishes and repairs hair effectively acting also on heavily stressed hair. AQ-SAVE can be used in shampoo and conditioners as well as in leave on products..

Laboratory tests performed using a Scanning Electron Microscope (SEM) shown that a 1% w/w AQ-SAVE containing treatment is able to repair the surface of a stressed hair as efficiently as synthetic silicones.



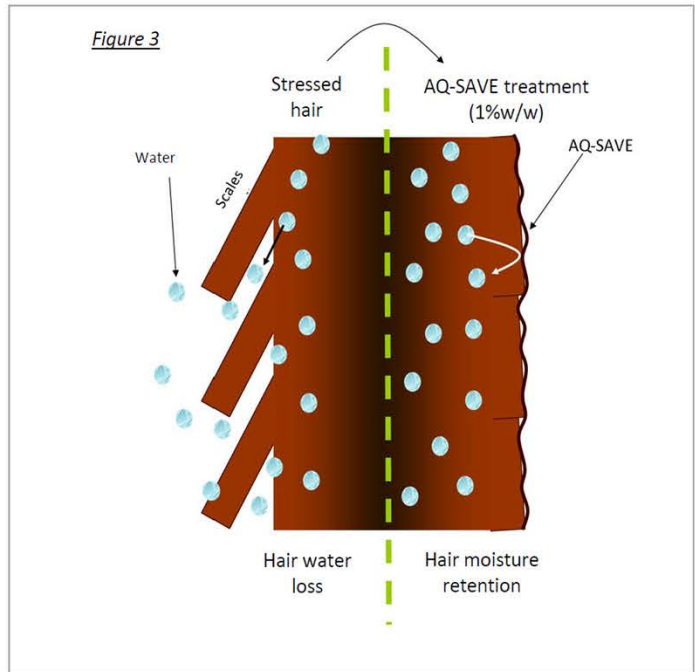
# AQ-SAVE increases hair moisture



healthier hair  
hair moisture  
increased up  
to 30%

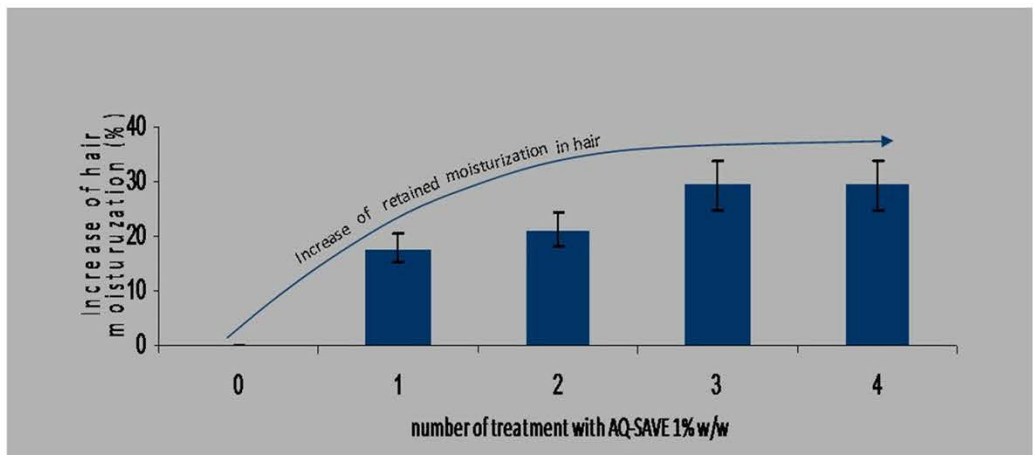
AQ-SAVE overlays and repairs hair surface even when extremely damaged by stressful treatments (Figure 2b-d). A less damaged hair surface, being smoother and more flat, reflects light more efficiently making hair looking better and more shiny.

AQ-SAVE, overlaying and repairing hair surface, helps hair to retain water remaining moisturized and healthy (Figure 3).



Laboratory tests shown that AQ-SAVE treated hair better retain moisturization starting from the first application (Figure 4).

AQ-SAVE moisturizing performances increase reaching a maximum effect with three applications only (Figure 4).



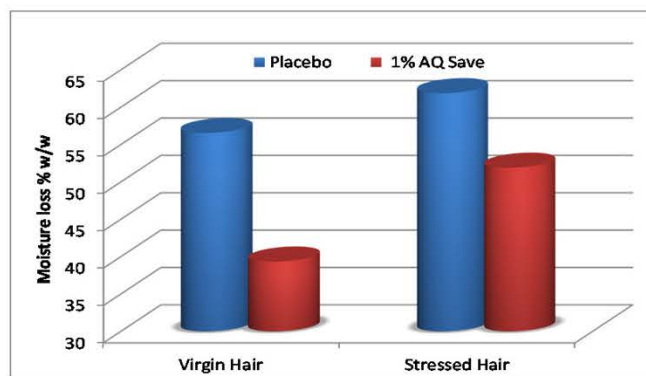
**Figure 4:** increase (%) of retained moisturization in human hair swatches treated with AQ-SAVE vs untreated samples (PLACEBO):

➤ (AQ-SAVE): human hair swatches treated with a water solution containing AQ-SAVE 1% w/w, rinsed, dried with hair drier and stressed with a thermal treatment performed at 50°C for 24 hours

➤ (PLACEBO): human hair swatches soaked in water rinsed, dried with hair drier and stressed with a thermal treatment performed at 50°C for 24 hours

## AQ-SAVE hot iron treatment protection

Laboratory tests have been performed in order to evaluate hair moisture retention effect that AQ-SAVE is able to deliver even after stressful treatments such as the use of hot iron to straighten or curl hair. The AQ-SAVE treatment allows to better retain hair moisturization even when hair are heavily stressed with several cycles of hot iron treatment.



**AQ-SAVE can protect hair, even during stressful treatments such as hot iron straightening, preventing hair moisture loss up to 30% on both healthy and stressed hair**

### **AQ-SAVE** technical specifications:

**CTFA name:** HYDROLYZED CHESTNUT EXTRACT

**Active principles contained:** short chain sugars, proteins, fatty acids

**Ingredients:** water, *Castanea sativa* (fruit), citric acid, sodium benzoate, potassium sorbate.

**Suggested concentration of use:** 1% w/w

**Solubility:** soluble in water, alcohol, glycerin

**pH:** 2,8 – 3,5

**Stable in formulation with pH from 1 to 8**

**Suggested for:** Hair Care (shampoo, conditioners, gel, hair creams and masks etc.)

**Can be inserted both in hot and cold condition during cosmetic preparation**

**Organic Certificate:** produced according with the Eco Bio Cosmesi protocol approved by ICEA, via Nazario Sauro 2, 40121 Bologna (Product Code: 167)



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