

# HAIR PLUGINS

RESTORES THE NATURAL LIPIDS OF THE HAIR

## ASSESSA

INNOVATION FOR A GREENER WORLD



NATURAL  
ORIGIN  
99.90%

**PLUGIN GS  
SOFTENS  
THE HAIR  
AND  
INCREASES  
GLOSS**

**1** **PLUGIN GS** is a biomimetic association of lipids that simulates the composition of the oil produced by the sebaceous glands.

**2** **PLUGIN GS** is designed to be used with other **ASSESSA** actives as a booster to improve their activity or to create an entirely new set of benefits. It can also be used as the active ingredient for the treatment of extremely dry hair.

**3** **PLUGIN GS** is the result of a careful balance of 100% natural extracts, monoesters, triglycerides and squalane that restores the lipid balance for dry, brittle and damaged hair.



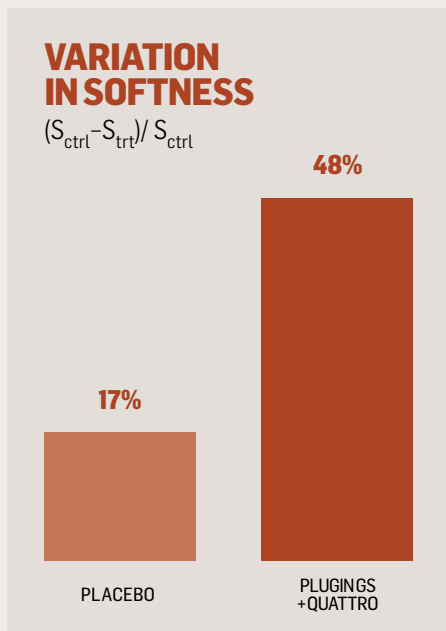
## BOOSTING EFFECT

# PLUGIN GS + QUATTRO

The combination of **PLUGIN GS** and **QUATTRO**, strongly increases the softness of coily hair (hair type 4), preserving the curls with an added anti-frizz effect.

## 1 OBJECTIVE TEST SOFTNESS

Softness is an attribute that can be tactilely identified via resistance and then recovery of hair from externally induced deformation. The purpose of this study was to assess the softness of hair curls, using the Ring Compressibility Method. The control tresses were treated with a placebo formula and test strands treated with a formula using 2% of **PLUGIN GS** and 5% of **QUATTRO**. Small values of S indicate that the tresses need little energy to be compressed, indicating that it is softer. See the results in the figure below.

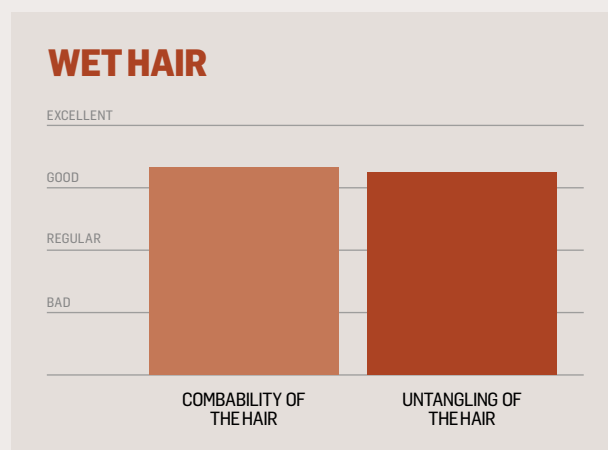


Mean results of S (N.mm) for the tresses of the study groups. Calculation of variation in softness (%) of the study groups in comparison to the CTRL group, where:  $S_{CTRL}$  = S values for the CTRL group;  $S_{TRT}$  = S values for the treatment group(s).

The formula with **PLUGIN GS** + **QUATTRO** improved in 48% the softness of the hair and it's 38% better compared with the placebo.

## 2 CONSUMER EVALUATION

A formula containing **PLUGIN GS** + **QUATTRO** was tested in by volunteers (hair types 3 and 4) who were instructed to use the product at home. The consumer evaluation of the product is seen below.



## 3 CURL RETENTION

**PLUGIN GS** + **QUATTRO** had a remarkable effect on curl retention, keeping the curls in average for more than 8 hours.





## BOOSTING EFFECT

# PLUGIN GS + QUATTRO + ORMAGEL XPU

**A formula containing PLUGIN GS, QUATTRO and ORMAGEL XPU, moisturizes and preserves the curls, with a good anti-frizz effect, and is suggested for hair type 3 (curly hair) or 4 (coily hair) with some damage, such as dryness, porosity or chemical treatment.**

ORMAGEL XPU adds moisturization, reconstruction and emollience. A cream using the combination QUATTRO + PLUGIN GS + ORMAGEL XPU was tested on damaged hair type 4 and **transitional hair**

(hair that is changing from straightened to naturally curly). The formula used 3% of QUATTRO, 2% of PLUGIN GS and 2% of ORMAGEL XPU. The pictures below show the results.

## 4 SALON TEST

A half head test was made by a trained professional using a formula containing PLUGIN GS + QUATTRO. A combing cream was applied after washing the volunteer's hair. A placebo combing cream was applied on one half of the volunteer's head, while the cream using 3% of QUATTRO and 2% of PLUGIN GS was applied on the other half. The summary of the professional evaluation is seen below:

### Style and retain curly hair

PLUGIN GS+QUATTRO received an excellent afterwashing evaluation for type 4 hair. The formation of the curls and frizz reduction were noticed immediately. A highlight of PLUGIN GS + QUATTRO combination is the fast curl definition. The professional applied the combing cream without any previous treatment or using any appliance such as hot iron for modeling the curls. She merely applied the combing cream by hand.

### Hair combability and untangling

PLUGIN GS + QUATTRO combination also received an outstanding grade. According to the professional evaluation, the formula could even untangle **hair extensions** types 3 and 4 – which is very difficult.

## SALON TEST



**Left:** Volunteer Half-head treated with placebo. **Right:** Volunteer Half-head treated with QUATTRO + PLUGIN GS + ORMAGEL XPU

The formula containing PLUGIN GS + QUATTRO + ORMAGEL XPU provided excellent curl duration, keeping the curls in average for more than 8 hours. The professional applied

the combing cream without any previous treatment or using any appliance such as hot iron for modeling the curls. She merely applied the combing cream by hand.

# PLUGINS

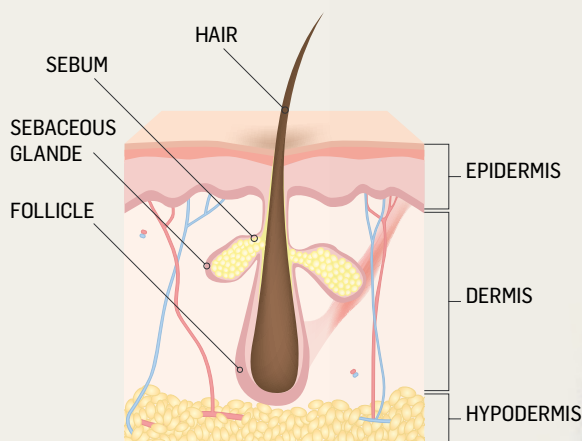
RESTORES THE NATURAL LIPIDS OF THE HAIR

## HOW IT WORKS

# HAIR LUBRICATION

Sebum – the lipid mixture secreted by the sebaceous gland in humans (see figure below) – is composed by triglycerides, wax esters, squalene and free fatty acids and is very important to waterproof and lubricate the hair, preventing it from becoming dry or brittle. The lubrication of the hair fiber is more intense and efficient in the areas near the scalp, where sebum

surfaces, but as the hair grows and moves away from the scalp, the spreading of the sebum becomes dependent on the friction and capillary pressure between the strands. However, when the hair is curly, capillary friction and pressure between the strands are reduced greatly, impairing the lubrication of the hair. As a result, highly coily/curly hair tends to be brittle and dry.



## PLUGINS RESTORES HAIR NATURAL LIPIDS

### INCI NAMES

Salvia Hispanica (Chia) Seed Extract, Helianthus annuus (Sunflower) Seed Oil, Simmondsia Chinensis (Jojoba) Seed Oil, Isopropyl Palmitate, Hydrogenated Farnesene, Tocopheryl Acetate

Salvia Hispanica (Chia) Seed Extract, Helianthus annuus (Sunflower) Seed Oil, Simmondsia Chinensis (Jojoba) Seed Oil, Isopropyl Palmitate, C13-15 Alkane, Tocopheryl Acetate

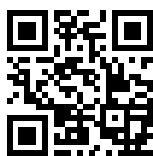
## BOOSTING EFFECT

### PLUGINS + QUATTRO

Style and retains curls, softens, untangles type 4 hair.

### PLUGINS + QUATTRO + ORMAGEL XPU

Moisturizes, style and retain curls. For damaged hair types 3 and 4 and transitional hair. Excellent for untangling hair extensions.



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