

Salon Half-Head Study



Cleansing Smoothing
 Increased Shine and Hydration
 Nourishing Reduce Frizz
 Functional
 Conditioning

ABSTRACT

The condition of the cuticle (the outer most layer of the hair) significantly affects both the manageability and sleekness of our hair. Over time, hair can become damaged, which can result in the cuticle lifting because of both environmental and styling influences and processes. The result: lifeless, dull hair that is difficult to manage. Improving the sleekness of hair has been shown to instantly create a healthier more youthful appearance. Increasing combability not only eases manageability, but also helps to minimize physical damage that perpetuates the loss of body and difficulty in styling.

ABS Pomegranate Sterols is a unique product designed to provide shine and conditioning benefits. However, this unique ingredient also enhances cleansing, smoothing, dry and wet combability, anti-frizz, overall feel, shine and hydration when used in hair care products. The purpose of this study was to confirm whether **ABS Pomegranate Sterols** is capable of providing benefits when included in a shampoo and conditioner application.

A half head study was conducted to determine the comparison of a control shampoo vs. 2.0% **ABS Pomegranate Sterols** in the control shampoo. Additionally, a comparison between the control conditioner and 2.0% **ABS Pomegranate Sterols** in the control conditioner were reported. Each volunteer's hair was photographed prior to the treatment and again after the shampoo and conditioner had been applied and the hair was styled. The images of the half head study were used in conjunction with a sensory assessment subjectively rating the parameters - cleansing, smoothing, dry and wet combability, anti-frizz, overall feel, shine and hydration. This assessment was conducted both before and after treatment. Based on the results obtained, **ABS Pomegranate** is capable of enhancing cleansing, smoothing, wet and dry combability, anti-frizz, overall feel, shine and hydration of the hair. These attributes make it an ideal ingredient for use in products intended for all hair types.

Code Number: 10247

INCI Name: Punica Granatum Sterols

INCI Status: Approved

CAS Number: 949109-75-5

EINECS Number: N/A

TRF#: HRI 005

Lot Number(s): 65622P

Suggested Use Levels: 0.50-5.0%

Use Level for Assay: 2.0%

Sponsor:

Active Concepts, LLC
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Principle Investigator:

Candice Sneed

Suggested Applications:

Increase Hair Shine and Overall Feel,
 Reduce Frizz

Benefits of **ABS Pomegranate Sterols**:

- Enhances Shine
- Improves Wet and Dry Combability
- Smoothing

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MATERIALS AND METHODS

The study was conducted using five participants. Each subject had their baseline photo taken prior to having their hair washed. The participant was also asked to complete a survey rating their hair prior to treatment on a scale of 1 to 10, with 1 being the lowest and 10 being the highest, using the following parameters cleansing, smoothing, dry and wet combability, anti-frizz, overall feel, shine and hydration.

Half of the head was treated with the control shampoo and conditioner while the other half of the head was treated with 2.0% **ABS Pomegranate Sterols** in the base shampoo and base conditioner. After the application and rinse of the test and positive control products, each participant's hair was blown dry using a round brush on both sides of the head. Once the hair was completely dry, the participant was asked to again assess the same parameters of both halves of their hair. Assessments were made using a rubric from 1 to 10, with 1 being the lowest and 10 being the highest.

RESULTS

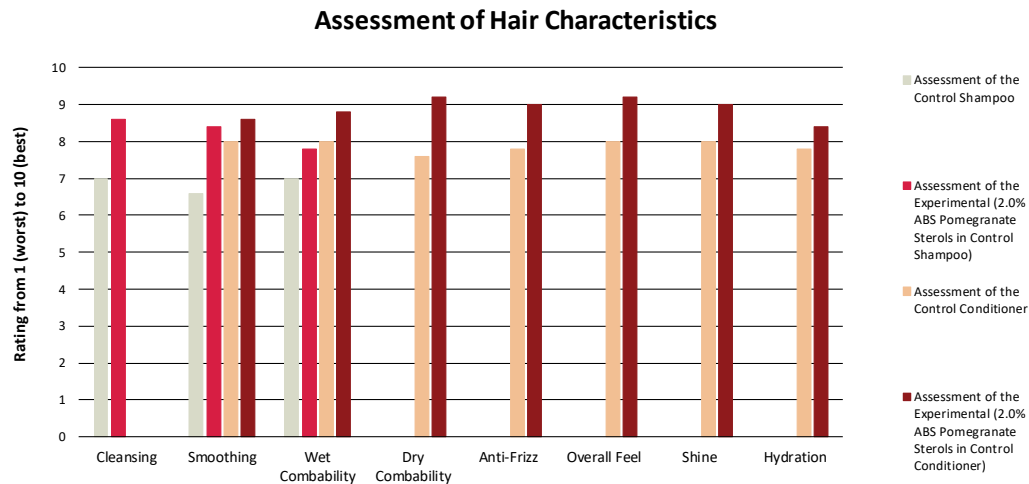
Parameters Tested	Assessment of the Control Shampoo	Assessment of the Experimental (2.0% ABS Pomegranate Sterols in Control Shampoo)	Assessment of the Control Conditioner	Assessment of the Experimental (2.0% ABS Pomegranate Sterols in Control Conditioner)
Cleansing	7	8.6	X	X
Smoothing	6.6	8.4	8	8.6
Wet Combability	7	7.8	8	8.8
Dry Combability	X	X	7.6	9.2
Anti-Frizz	X	X	7.8	9
Overall Feel	X	X	8	9.2
Shine	X	X	8	9
Hydration	X	X	7.8	8.4
Mean	6.87	8.27	8.00	8.70

Chart 1. Average Results for Participant's Sensory Assessment.

Parameters Tested	Percent Difference – Comparison of Control Shampoo vs. Experimental (2.0% ABS Pomegranate Sterols in Control Shampoo)	Percent Difference – Comparison of Control Conditioner vs. Experimental (2.0% ABS Pomegranate Sterols in Control Conditioner)
Cleansing	21%	X
Smoothing	24%	7%
Wet Combability	11%	10%
Dry Combability	X	19%
Anti-Frizz	X	14%
Overall Feel	X	14%
Shine	X	12%
Hydration	X	7%

Chart 2. Percent Difference of Participant's Sensory Assessment.

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Graph 1. Rating of hair characteristics following sensory assessment.



Figure 1. Full head Baseline, Untreated Hair.

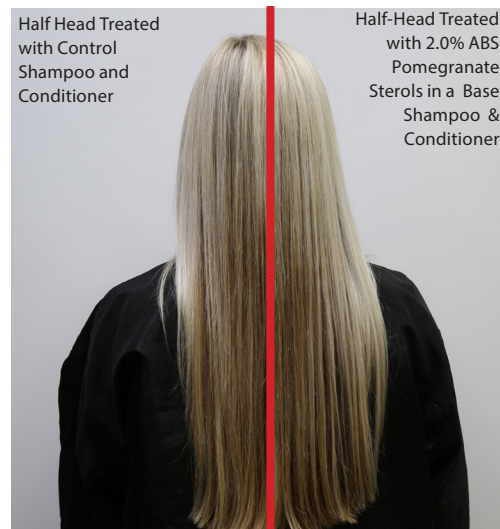


Figure 2. Half Head Treated.



Figure 3. Full head Baseline, Untreated Hair.

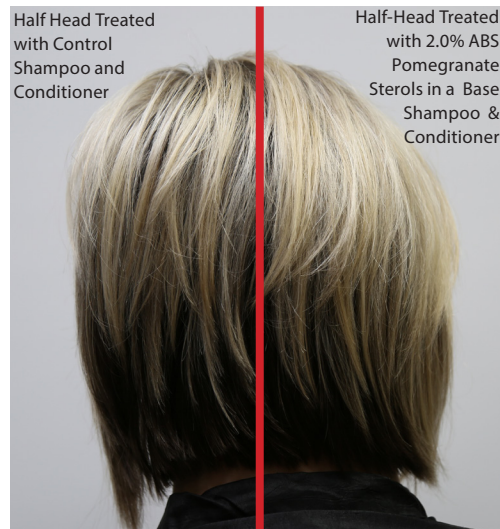


Figure 4. Half Head Treated.

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Figure 5. Full head Baseline, Untreated Hair.



Figure 6. Half Head Treated.



Figure 7. Full head Baseline, Untreated Hair.



Figure 8. Half Head Treated.



Figure 9. Full head Baseline, Untreated Hair.



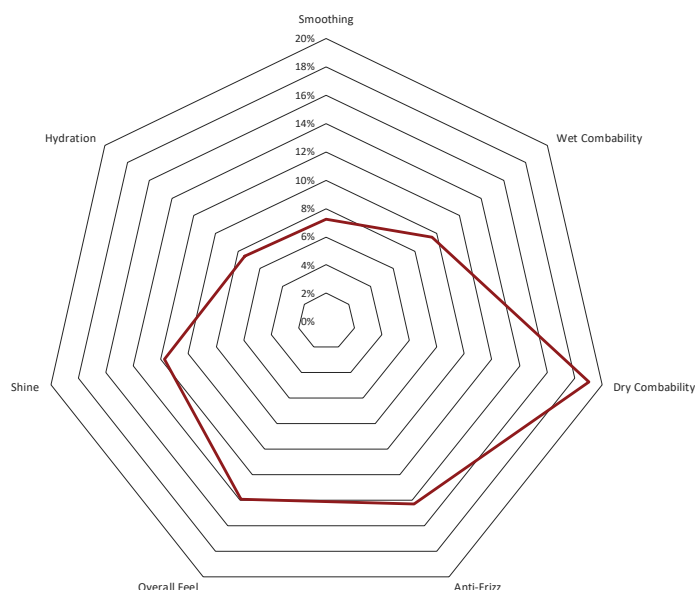
Figure 10. Half Head Treated.

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When comparing hair characteristics of the baseline assessments to the post style assessments, the benefits of including 2.0% **ABS Pomegranate Sterols** in a shampoo and conditioner are even more apparent. In relation to the baseline readings, the test-half of the head improved the intended subjective parameters, improving cleansing, smoothing, wet combability, for the shampoo, by 21%, 14%, and 11% respectively. The conditioner with the active, **ABS Pomegranate Sterols**, improved smoothing, wet and dry combability, anti-frizz, overall feel, shine and hydration by 7%, 10%, 19%, 14%, 14%, 12%, and 7% respectively. It is clear from the images in this study that **ABS Pomegranate Sterols** helps create a smooth, sleek hairstyle. Additionally, in all images, the hair is noticeably shinier and has a more conditioned appearance.

The professional stylist who performed the actual tests by applying the product, styling the hair and documenting the images said **ABS Pomegranate Sterols** is great for improved hydration and shine of the hair. The subjects liked the consistency and it seemed to work well in the conditioner application. Perfect for use in treatments to revive damaged hair and provide a youthful, silky feel.

Comparison of Control Conditioner vs. Experimental (2.0% ABS Pomegranate Sterols in Control Conditioner)



Graph 2. Hair Assessment results for sensory characteristics.

DISCUSSION

The results of the assessment indicate that when incorporated into a shampoo, 2.0% **ABS Pomegranate Sterols** did show improvement in cleansing, smoothing, and wet combability. However, when used in a conditioner **ABS Pomegranate Sterols** is capable of improving smoothing, dry and wet combability, anti-frizz, overall feel, shine and hydration more than the control conditioner. These results can be further supported by Figures 1 through 10, where clearly the half of the subject's head treated with 2.0% **ABS Pomegranate Sterols** appears healthy and silky smooth. Additionally, the subjects reported a significant increase in smoothness and overall feel of the hair.