Floramac 10 Reduced Wet and Dry Comb Force in a Leave-In Hair Serum Compared to Silicones

Objective:
To evaluate Floramac 10 for its potential to improve hair conditioning as measured by wet and dry comb force, compared to silicones.

Method:
Leave-in hair serums containing either Floramac 10, cyclopentasiloxane, or phenyl trimethicone were applied to wet hair tresses. Wet and dry comb force measurements were taken at baseline and post-treatment.

Results:
The leave-in hair serum containing Floramac 10 reduced wet comb force 45% more than the leave-in hair serum with phenyl trimethicone, and reduced dry comb force 2.6 times as much as the leave-in hair serum with cyclopentasiloxane.

Floratech Ingredient: Floramac 10

The ex vivo study of Floratech® test formulation (CTL_16-067) was conducted on (n=8 per test article) naturally curly, dark brown, six inch long hair tresses (DeMeo Brothers Inc.) that were damaged via bleaching and then washed with sodium lauryl sulfate prior to use in the study. Treatment consisted of a 30 second rinse, one application of the leave-in hair serum test article (0.5 ml / 1.5 g of hair), ten combs, four minutes of blow drying, and ten passes of a flat iron at 450°F (232°C). Peak wet and dry comb force (gram-force) measurements were made using a Test Resources Q Series (100Q) Universal Testing Machine (TestResources, Inc.). This study was double-blind and randomized. The inclusion of Floramac 10 resulted in statistically significant (p<0.05) reductions in wet comb force compared to phenyl trimethicone; and in statistically significant (p<0.05) reductions in dry comb force compared to both cyclopentasiloxane and phenyl trimethicone. All test articles resulted in statistically significant (p<0.05) changes in wet and dry comb force from baseline.

(A Vehicle + 86.7% Floramac 10 / B Vehicle + 86.7% Cyclopentasiloxane / C Vehicle + 86.7% Phenyl Trimethicone
Vehicle Hair Serum (%wt/wt): Test Emollient (q.s.), Glycerol Tribehenate/Isostearate/Eicosadioate (10.0%), Polyglyceryl-3 Beeswax (2.7%), and Phenoxyethanol (0.6%).)