



IMPROVED COLOR RETENTION OF HAIR DYES WITH FLORAESTERS K-100® JOJOBA IN A CONDITIONER

CS 15-075



Floraesters K-100 Jojoba in a Conditioner Improves Color Retention of Hair Dyes

Objective:

To evaluate Floraesters K-100 Jojoba for its potential to improve hair dye color retention.

Method:

Wool swatches were dyed with commercial red or brown permanent hair dyes. Swatches underwent 8 condition / rinse treatment cycles using conditioners with or without 1% Floraesters K-100 Jojoba. Change in color (ΔE)



from pre-condition was measured after every 2 washes.

Results:

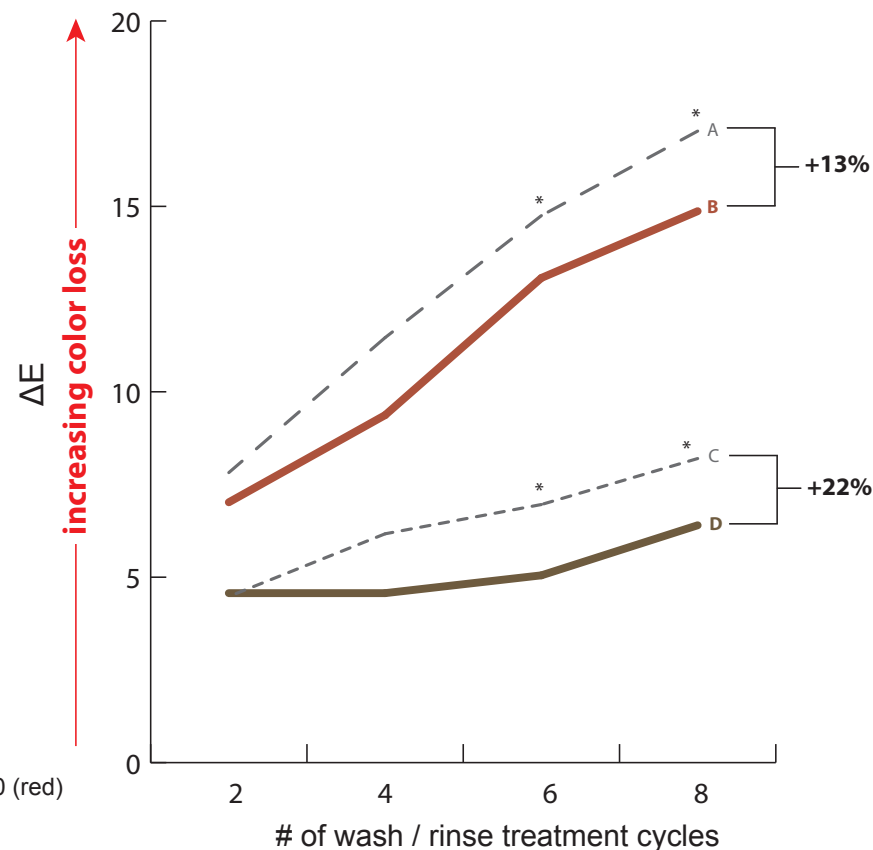
Wool swatches dyed with commercial red or brown permanent **hair dyes retained up to 22% more color** (test article D) when a conditioner containing 1% Floraesters K-100 Jojoba was compared to a conditioner without Floraesters K-100 Jojoba.

Vehicle (%wt/wt): Water (q.s.), Glyceryl Stearate (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate (6.0%), Cetyl Alcohol (2.0%), Propanediol (1.0%), Polyglyceryl-2 Stearate (1.0%), Ethylhexyl Methoxycinnamate (and) BHT (1.0%), Theobroma Grandiflorum Seed Butter (and) Tocopherol (1.0%), Prunus Amygdalus Dulcis (Sweet Almond) Oil (1.0%), Ethyl Macadamiate (1.0%), Phenoxyethanol (and) Caprylyl Glycol (and) Ethylhexylglycerin (and) Hexylene Glycol (0.8%), Fragrance (0.5%), Tocopheryl Acetate (0.5%), Cetyl Hydroxyethyl Cellulose (0.1%), and Disodium EDTA (0.1%).

Floratech Ingredient: Floraesters K-100 Jojoba

- A - vehicle conditioner (red)
- B - vehicle conditioner + 1% K-100 (red)
- - C - vehicle conditioner (brown)
- D - vehicle conditioner + 1% K-100 (brown)

Color Retention



The clinical study of Floratech® test formulation (CTL_14-057) was conducted on 2" x 2" worsted gabardine wool swatches (n=3 per test article) obtained from Test Fabrics, Inc (West Pittston, PA). The hair dyes used were Vidal Sassoon®, Pro Series London Lux (6RR Runway Red) (Proctor & Gamble Company, Cincinnati, OH) and Garnier Fructis®, HerbaShine® Color Crème (500 Medium Brown) (L'Oreal, Paris, France). Wool swatches were dyed according to package instructions. The study was blinded, and carried out under controlled temperature and humidity conditions. A condition / rinse cycle consisted of immersing the wool swatch in 200ml of the test article solution (2% volume/volume) and stirring (for 1 minute using a magnetic stir bar), followed by immersing the wool swatch in 200ml of water and stirring. Color intensity for each swatch was measured using a Colorimeter CL 400 (Courage + Khazaka, Köln, Germany) at baseline prior to treatment, and after each set of two condition / rinse treatment cycles. Color loss was calculated from $L^*a^*b^*$ values using the following equation: $\Delta E = \sqrt{[(L^*_2 - L^*_1)^2 + (a^*_2 - a^*_1)^2 + (b^*_2 - b^*_1)^2]}$. (Clinical Study 14-057B and 14-057F reports available upon request.)

* Indicates statistical significance (p<0.05) between test articles.