ACCELERATED DYEING TIME WITH FLORAESTERS K-20W® JOJOBA IN A HAIR DYE

CS 16-080

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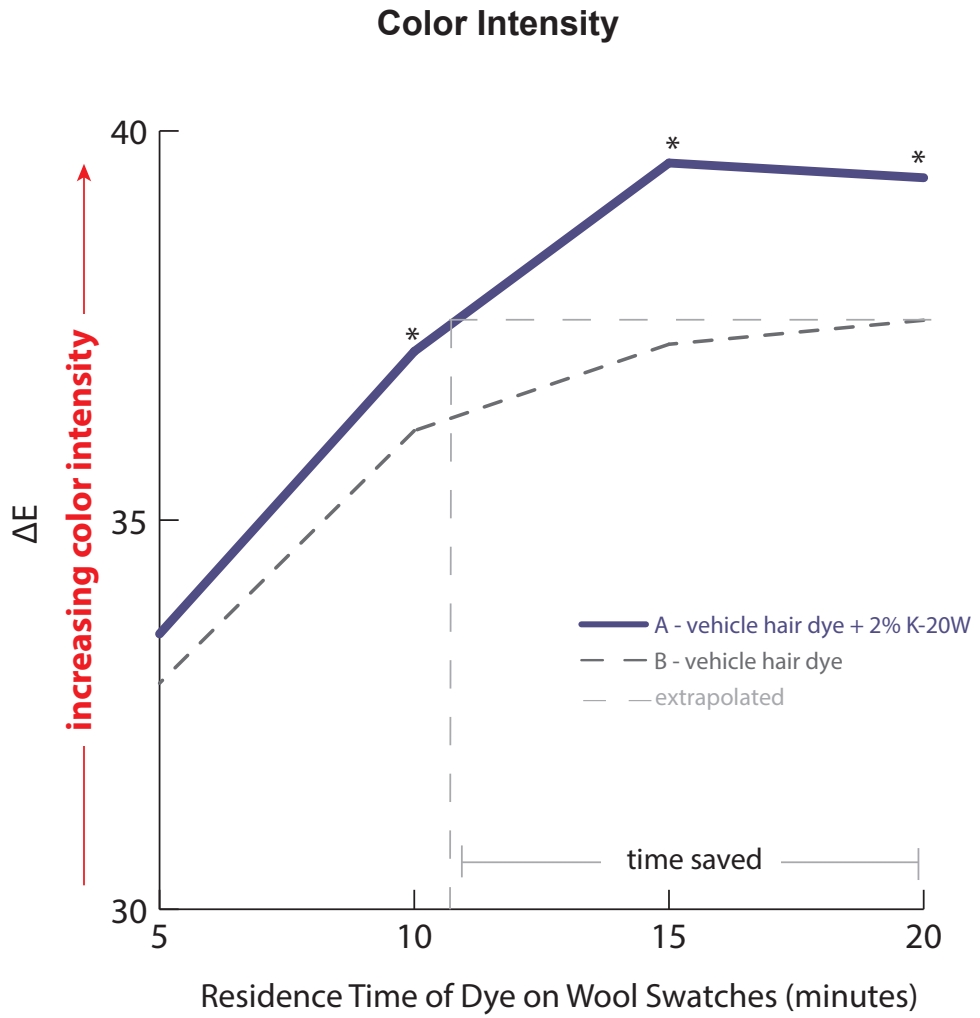
Floraesters K-20W Jojoba in a Hair Dye Accelerates Dyeing Time



Objective:

To evaluate Floraesters K-20W Jojoba in a hair dye for its potential to reduce the amount of time a hair dye must reside on the hair (*i.e.* accelerate hair dyeing time).

Method:

Brown permanent hair dyes with and without 2% Floraesters K-20W Jojoba were applied to wool swatches, and change in color (ΔE) from pre-dye was measured after 5, 10, 15, and 20 minutes of residence time.

Results:

Wool swatches dyed with the permanent hair dye containing 2% Floraesters K-20W Jojoba ***achieved the same color intensity with just over 10 minutes*** of residence time as the vehicle hair dye with 20 minutes of residence time.

A = vehicle hair dye + 2% Floraesters K-20W Jojoba / B = vehicle hair dye
Vehicle Hair Dye (%wt/wt): Water (q.s.), Cetearyl Alcohol (and) Ceteareth-20 (13.0%), Cetyl Alcohol (12.0%), Ethanolamine (5.0%), Oleic Acid (4.0%), Ethoxydiglycol (2.0%), Propylene Glycol (2.0%), Sodium Lauryl Sulfate (1.0%), Sodium Sulfate (1.0%), Ascorbic Acid (0.5%), p-Phenylenediamine (0.5%), and Tetrasodium EDTA (0.2%).

Floratech Ingredient: Floraesters K-20W Jojoba

The clinical study of Floratech® test formulation (CTL_15-062) was conducted on 2" x 2" worsted gabardine wool swatches (n=3 per test article) obtained from Test Fabrics, Inc. Permanent hair dyes were mixed with a developer (20 standard lift) at a 1:1 ratio immediately before dye application. The study was blinded, and carried out under controlled temperature and humidity conditions. Color intensity for each swatch was measured using a Colorimeter CL 400 (Courage + Khazaka) at baseline prior to hair dye exposure, and after 5, 10, 15, and 20 minutes of dye residence time. Color change 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 15-062 - Phase I report available upon request.)

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

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