



LIQUID FOUNDATION WEAR IMPROVED WITH FLORAESTERS K-20W® JOJOBA

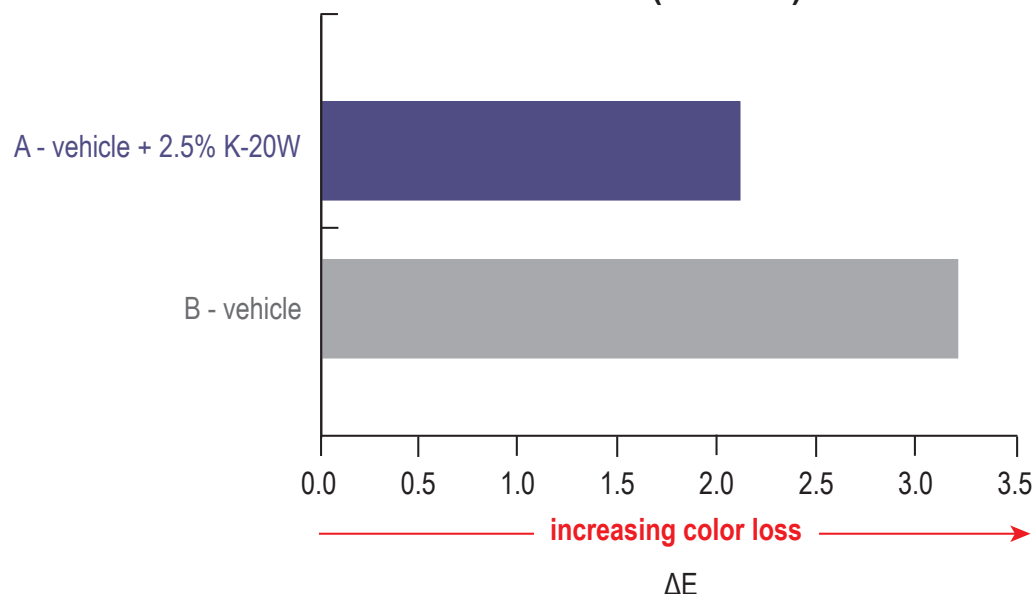
CS 20-140



Floraesters K-20W Jojoba in a Liquid Foundation Improved Color Longevity



Color Loss (8 Hours)



Objective:

To evaluate Floraesters® K-20W Jojoba in a liquid foundation for its potential to increase wear time of color.

Method:

Foundations with and without 2.5% Floraesters K-20W Jojoba were applied to the skin, and the change in color (ΔE) was determined after 8 hours of wear.

Results:

The foundation containing **2.5% Floraesters K-20W Jojoba** produced **54% less color loss (i.e. longer wear time)** after 8 hours compared to the vehicle.

A = vehicle foundation + 2.5% Floraesters K-20W Jojoba / B = vehicle foundation

Vehicle Liquid Foundation (%wt/wt): Deionized Water (q.s.), Titanium Dioxide (5.3%), Butylene Glycol (5.0%), Ethyl Macadamiate (5.0%), Isopropyl Jojobate (and) Jojoba Alcohol (and) Jojoba Esters (5.0%), Hydrogenated Sunflower Seed Oil Polyglyceryl-3 Esters (and) Hydrogenated Sunflower Seed Oil Glyceryl Esters (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate (4.0%), Stearyl Alcohol (3.5%), Glycerin (3.0%), Jojoba Oil/Macadamia Seed Oil Esters (and) Squalene (and) Phytosteryl Macadamiate (and) Phytosterols (and) Tocopherol (3.0%), Propanediol (3.0%), Helianthus Annuus (Sunflower) Seed Oil (2.0%), Iron Oxides (1.49%), Jojoba Esters (1.0%), Phenoxyethanol (and) Ethylhexylglycerin (1.0%), Magnesium Aluminum Silicate (0.85%), Boron Nitride (0.80%), Hydroxyethylcellulose (0.5%), Hydrogenated Sunflower Seed Oil Polyglyceryl-3 Esters (0.5%), Talc (0.5%), Tocopheryl Acetate (0.5%), Polyhydroxystearic Acid (0.35%), Ceramide NG (0.1%), and Citric Acid (and) Water (q.s.).

Floratech Ingredient: Floraesters K-20W Jojoba

The clinical study of Floratech® test formulation (CTL_16-070 - Foundation) was conducted on a panel of 20 healthy female subjects, ranging from 32 to 62 years of age (mean age = 50). The duration of the study was 2 days with 1 application of each test article made to the outer upper arm. The study was double-blind, and carried out under controlled temperature and humidity conditions. Color intensity of the foundation was measured using a Colorimeter CL 400 (Courage + Khazaka) immediately after foundation application, and after 8 hours of wear time. Color change was calculated from $L^*a^*b^*$ values using the following equation: $\Delta E = \sqrt{[(L^*_2 - L^*_1)^2 + (a^*_2 - a^*_1)^2 + (b^*_2 - b^*_1)^2]}$. The inclusion of Floraesters K-20W Jojoba resulted in statistically significant less color loss ($p < 0.001$). (Clinical Study 16-070 - Phase I - Foundation report available upon request.)