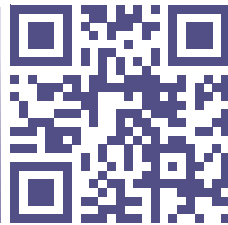




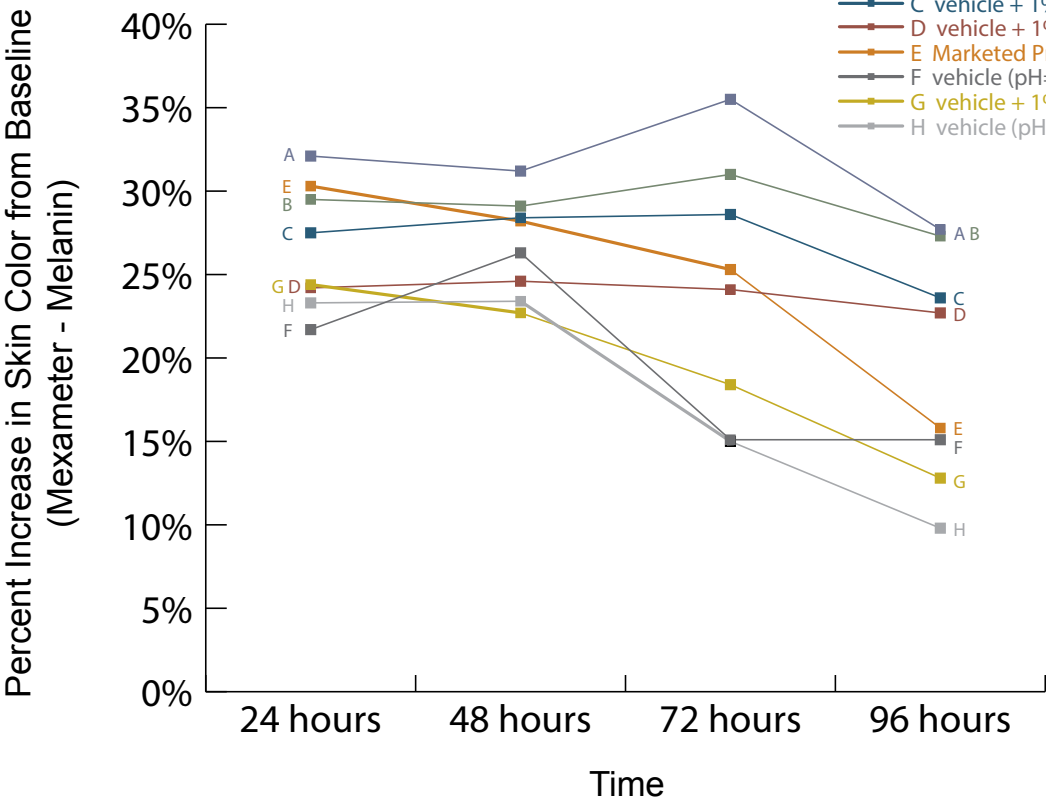
INCREASED COLOR RETENTION WITH FLORAESTERS K-20W® JOJOBA IN A SUNLESS TANNER

CS 13-048



Floraesters K-20W Jojoba in a Sunless Tanner Increases Skin Color Retention

Color Retention



Floraesters K-20W Jojoba enhanced skin color retention in a sunless tanner containing 5% dihydroxyacetone better than the vehicle test articles at 24, 48, 72, and 96 hours.

Peak change in skin color occurred at 24 or 48 hours for all test articles that did NOT include Floraesters K-20W Jojoba, and at 72 hours for those that did contain Floraesters

K-20W Jojoba. The graph to the left shows the percent change in skin color associated with sunless tanning. All test articles containing Floraesters K-20W Jojoba produced statistically significantly ($p < 0.05$) higher percent changes in skin color than the vehicles at the 72 and 96 hour time points.

Baseline Mexameter melanin measurements for skin color were taken on normal backs. One application of each test article was then made to the appropriate test site (2.5 mg/cm^2). Measurements were repeated 24, 48, 72, and 96 hours post test article application.

Vehicle (%wt./wt.): Water (q.s.), Dihydroxyacetone (5.00%), Coco Caprylate Caprate (3.00%), Sodium Acrylate / Sodium Acryloyldimethyl Taurate Copolymer (and) Isohexadecane (and) Polysorbate 80 (3.00%), Glycerin (2.00%), Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Propylparaben (0.80%), Fragrance (0.20%), and Citric Acid (q.s.)

Floratech Ingredient: Floraesters K-20W Jojoba

The clinical study of Floratech® test formulation (CTL_12-048) was conducted on a panel of 15 healthy men and women ranging from 25 to 60 years of age with normal skin on the back. The data presented above was taken over 5 days with 1 application of the test article, and the Mexameter (melanin) measurements were taken under controlled temperature and humidity conditions. This study was double-blind and randomized. Dihydroxyacetone (INCI: Dihydroxyacetone) was supplied by EMD Chemicals Inc.; Erythrose (INCI: Erythrose) was supplied by DSM Nutritional.; and Dermacryl-79 (INCI: Acrylates/Octylacrylamide Copolymer) was supplied by Akzo Nobel Chemicals. Mexameter MX 18 is a product of Courage+Khazaka. The marketed product was Summer Color® Self-Tanning Lotion Deep Dark Color (Sun Pharmaceuticals Corp., Westport, CT). (Clinical Study 12-048 - Phase I report available upon request.)