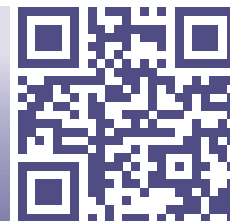




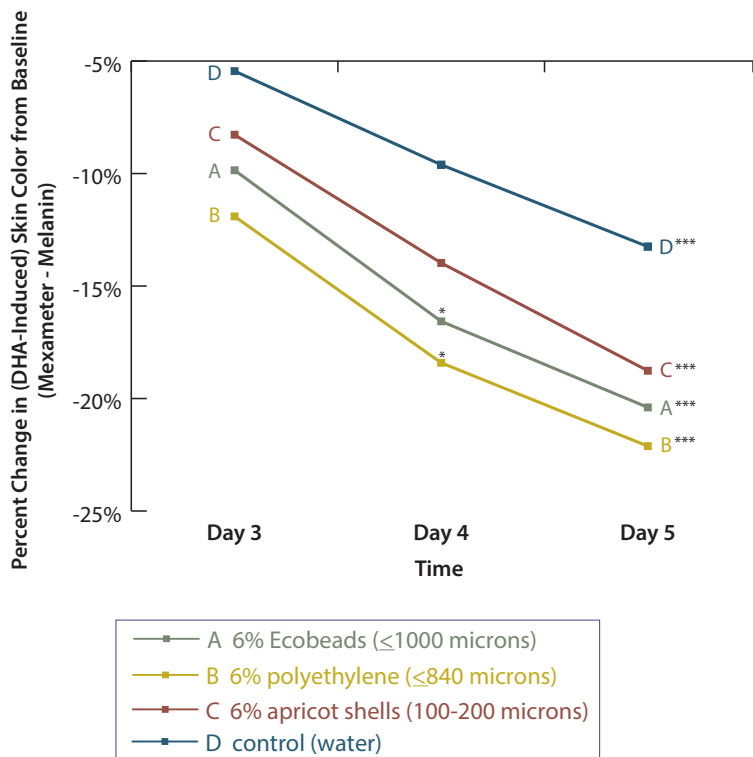
EXFOLIATION WITH BIODEGRADABLE ECOBEADS® IN A FACIAL SCRUB

CS 15-061



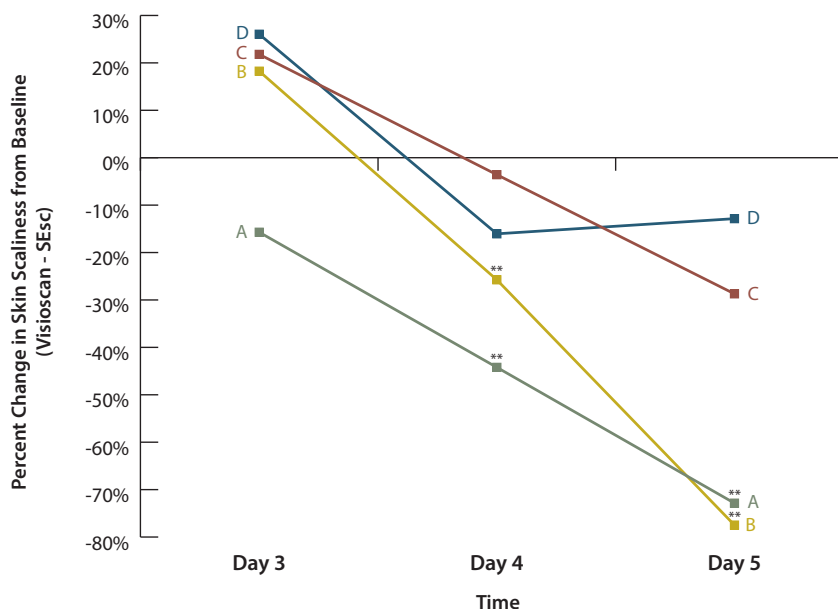
Ecobeads, Polyethylene Particles, and Apricot Shells Provide Similar Exfoliation Function

Color Change due to Exfoliation



Objective: To evaluate Ecobeads within a facial scrub for their potential to exfoliate compared to polyethylene particles and apricot shells (a natural polyethylene alternative).

Skin Scaliness Change due to Exfoliation



Method: Skin was patched with dihydroxyacetone (DHA) to induce color (on Days 1 and 2), followed by three days of twice-daily product use (on Days 3, 4, and 5). Skin color (melanin via Mexameter) and scaliness (SEsc) measurements (via Visioscan) were taken at baseline (on Day 3 prior to exfoliation) and post exfoliation (on Days 3, 4, and 5).

Results: Ecobeads exfoliated as effectively as polyethylene particles and apricot shells.

Vehicle (%wt/wt): Water (47.8%), Ammonium Laureth Sulfate (14.5%), Cocamidopropyl Betaine (13.0%), Distearyl Phthalic Acid Amide (4.5%), Cetyl Alcohol (4.0%), Stearyl Alcohol (4.0%), Butylene Glycol (2.0%), PEG-120 Methyl Glucose Dioleate (2.0%), Sodium Hydroxide (and) Water (15% solution) (0.9%), Citric Acid (30% solution) (0.8%), Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Propylparaben (and) Isobutylparaben (0.5%), and Disodium EDTA (0.05%).

Floratech Ingredient: ecobeads®

The clinical study of Floratech® test formulation (CTL_13-052) was conducted on a panel of 11 healthy females ranging from 24 to 44 (mean age = 33) years of age with normal skin on the arms. The data presented above was taken over five days with twice-daily controlled applications on Days 3, 4, and 5. Exfoliation was quantified by a reduction in the color produced by the DHA and the reduction of scaliness (indication of desquamation). The Mexameter (melanin/color) and Visioscan (scaliness) measurements were taken under controlled temperature and humidity conditions. Decreases in SEsc equate to less scaly skin (i.e. less desquamation on the stratum corneum). This study was double-blind and randomized. Dihydroxyacetone (INCI: Dihydroxyacetone) was supplied by EMD Chemicals Inc.; Microscrub® 20PC (INCI: Polyethylene) was supplied by Micro Powders; and Apricot Exfoliator 200 (INCI: Prunus Armeniaca (Apricot) Seed Powder) was supplied by Lessonia. Mexameter MX18 and Visioscan VC98 are products of Courage+Khazaka. (Clinical Study 13-052 report available upon request.)

* Indicates a statistically significant difference from the control (water). ** Indicates a statistically significant (p<0.05) difference from baseline. *** Indicates a statistically significant (p<0.05) difference from baseline at all evaluation time points.