L22 Improves and Maintains Long-Term Skin Hydration Better Than Petrolatum

Objective: To evaluate L22 in a daily-use lotion for its potential to improve long-term skin hydration and prevent regression (i.e., maintain skin hydration upon discontinuation of moisturizer use).

Method: Skin hydration measurements using a Corneometer were taken at baseline, after 1 and 2 weeks of twice-daily at-home test article use, and after 1 week of regression (no test article use).

Results: 3% L22 in a moisturizer increased skin hydration 4.6 times more after 2 weeks of use and maintained 2 times more skin hydration after a 1-week regression, compared to the same moisturizer containing 3% petrolatum (an occlusive ingredient).

Vehicle (%wt/wt): Water (q.s.), Ammonium Acryloyldimethyltaurate/VP Copolymer (0.60%), Sorbitan (and) Sucrose Cocoate (0.50%), Hydroxyethylcellulose (0.30%), Disodium EDTA (0.10%), and Methylisothiazolinone (0.07%).

Floratech Ingredient: L22

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

The clinical study of Floratech® test formulation (CTL_15-064) was conducted on a panel of 18 healthy females, ranging from 43 to 59 years of age (mean age = 51), with dry lower legs (due to a three day washout with a non-moisturizing soap). The duration of the study was three weeks; two weeks with twice-daily applications of each test article followed by one week of regression (no test article use). The study was double-blind, randomized, and carried out under controlled temperature and humidity conditions. The Corneometer CM 825 is a product of Courage+Khazaka (Köln, Germany). The test article with L22 resulted in statistically significant (p<0.05) increases in skin hydration from baseline at all time points; whereas the test article with petrolatum resulted in statistically significant (p<0.05) decreases in skin hydration after the one week regression (3 week). (Clinical Study 15-064 report available upon request.)