L22 Improves Skin Barrier Function Better Than Petrolatum

**Objective:**
To evaluate L22 in a daily-use lotion for its potential to improve / maintain skin barrier function during and post moisturizer use.

**Method:**
TEWL (transepidermal water loss) measurements (i.e. barrier function) using a Tewameter were taken at baseline, immediately post test article application, 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 daily-use lotion increased skin barrier function 1.5 times more after 2 weeks of use and maintained 2 times more skin barrier function after a 1-week regression, compared to the same daily-use lotion 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

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 immediate TEWL measurements were conducted 1 hour post test article application. The Tewameter TM 300 is a product of Courage+Khazaka (Köln, Germany). The test article with L22 resulted in statistically significant (p<0.05) increases in skin barrier function from baseline at all time points; whereas the test article with petrolatum initially resulted in a statistically significant (p<0.05) increase in barrier function (immediate), however also resulted in statistically significant (p<0.05) decreases in skin barrier function after one and two weeks of test article use. (Clinical Study 15-064 report available upon request.)