



# SUPERIOR SKIN BARRIER RECOVERY WITH L<sup>22</sup>® IN A LOTION

CS 13-056



## L<sup>22</sup> Improves Skin Barrier Recovery



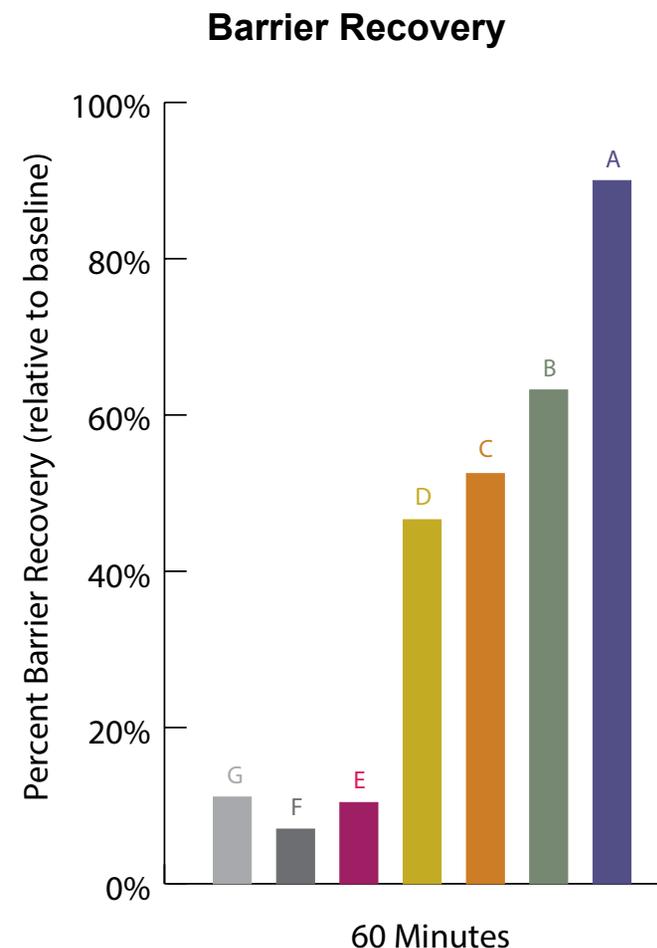
- A Vehicle + 3% L22 + 0.1% Ceramide 1
- B Vehicle + 3% L22
- C Vehicle + 3% Olive Oil + 0.1% Ceramide 1
- D Vehicle + 3% Olive Oil
- E Vehicle + 0.1% Ceramide 1
- F Vehicle
- G Water

L22, a botanically derived system which delivers the skin lipid profile of a healthy 22-year-old, improves the recovery of skin barrier function better than Olive Oil, another common emollient with skin-lipid-like components. When used in combination with Ceramide 1, L22 provides significantly greater barrier recovery than any other test article.

Transepidermal water loss (TEWL) was measured using a Tewameter TM300 on normal, untreated forearm skin. The forearms were then exposed to acetone to partially extract the natural skin lipids. TEWL measurements were again taken 30 minutes after acetone extraction, followed by one application of each test article. Additional TEWL measurements were taken 60 minutes after test article application. The percent barrier recovery (*i.e.*, reduction in TEWL as compared to the same site after acetone treatment but prior to test article treatment) was then determined for each test article. The data from the study are illustrated in the graph.

The test article containing 3% L22 + 0.1% Ceramide 1 enhanced barrier recovery more than all other test articles ( $p < 0.001$ ). The test article containing only 3% L22 also performed statistically significantly better than the vehicle + 3% Olive Oil ( $p < 0.05$ ) and the vehicle + 0.1% Ceramide 1 ( $p < 0.001$ ) 60 minutes after test article application.

Vehicle (%wt/wt): Water (q.s.), Methylisothiazolinone (and) Caprylyl Glycol (0.90%), Ammonium Acryloyldimethyl Taurate (and) VP Copolymer (0.60%), Sorbitan (and) Sucrose Cocoate (0.50%), Hydroxyethylcellulose (0.30%), and Disodium EDTA (0.10%).



**Floratech Ingredient: L<sup>22</sup>**

The clinical study of Floratech® test formulation (CTL\_10-034) was conducted on a panel of 15 healthy men and women ranging from 41 to 61 years of age with normal volar forearms. The duration of the study was one day with one application of the test article and TEWL measurements taken under controlled temperature and humidity conditions. This study was double-blind and randomized. The reference image seen above is for illustration only and was not taken during the actual study. Tewameter is a product of Courage+Khazaka and Ceramide 1 was supplied by Formulator Sample Shop. (Clinical Study 10-034 - Phase III report available upon request.)