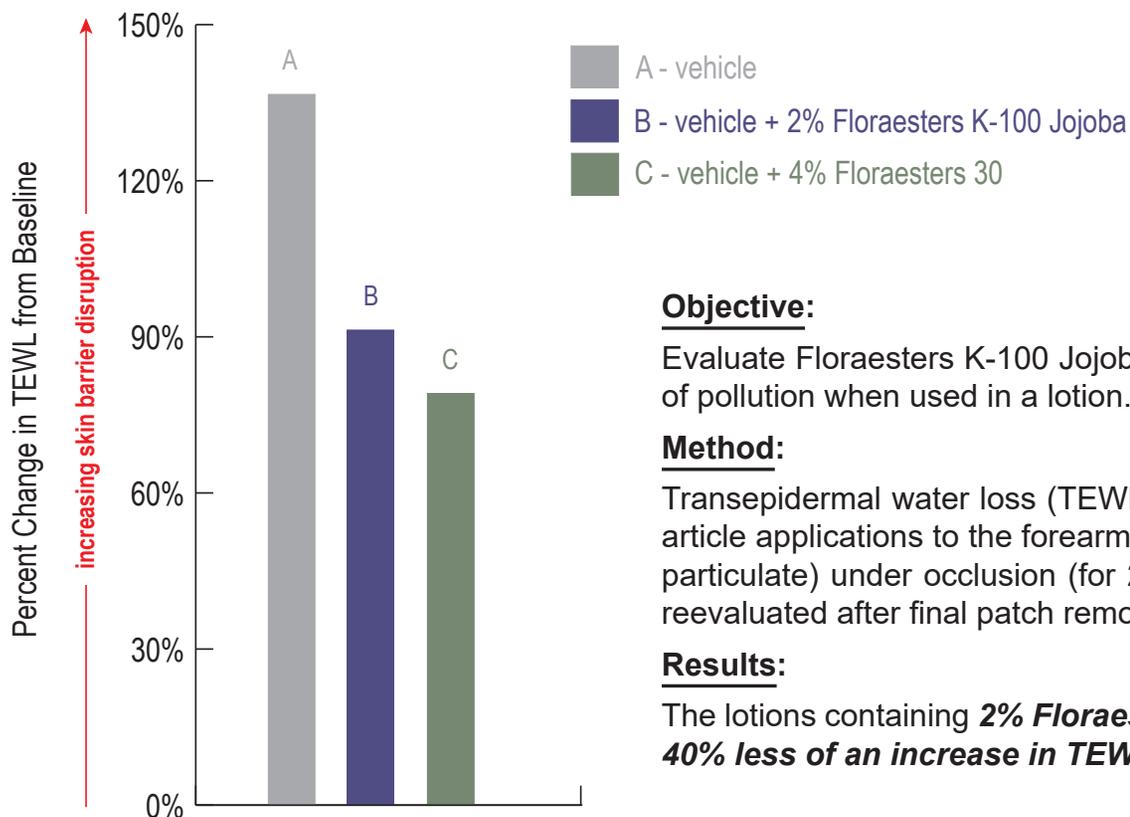




Floraesters K-100® Jojoba and Floraesters 30 in a Lotion Protected Skin from Pollution

Percent Change in TEWL



Objective:

Evaluate Floraesters K-100 Jojoba and Floraesters 30 for their potential to reduce the effects of pollution when used in a lotion.

Method:

Transepidermal water loss (TEWL) evaluations were made at baseline, followed by daily test article applications to the forearms for 3 days. Skin was exposed to pollution (*i.e.* atmospheric particulate) under occlusion (for 24 hours) following each test article application. TEWL was reevaluated after final patch removal.

Results:

The lotions containing **2% Floraesters K-100 Jojoba or 4% Floraesters 30 resulted in up to 40% less of an increase in TEWL** than the vehicle.

Vehicle Lotion (%wt/wt): Water (q.s.), Glyceryl Stearate (and) PEG-100 Stearate (4.0%), Cetyl Alcohol (3.0%), Glycerin (2.0%), Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Propylparaben (and) Isobutylparaben (0.7%), Xanthan Gum (0.2%), and Disodium EDTA (0.03%).

Floratech Ingredient: Floraesters K-100 Jojoba and Floraesters 30

The clinical study of Floratech® test formulation (CTL_17-076) was conducted on a panel of 37 male and female subjects, in 2 groups, ranging from 18 to 60 years of age (mean age = 41). The duration of the study was 7 days (including the 3 day washout) with 3 applications of each test article followed by 3 twenty-four hour occlusive patches with atmospheric particulate (Urban Dust, Standard Reference Material® 1649b, National Institute of Standards and Technology) suspended in phosphate buffered saline made to the volar forearm. The study was double-blind, randomized, and carried out under controlled temperature and humidity conditions. The Tewameter TM 300 is a product of Courage+Khazaka (Köln, Germany). The test articles with Floraesters K-100 Jojoba and Floraesters 30 resulted in statistically significantly ($p < 0.01$) less skin barrier disruption from baseline, as compared to the vehicle. (Clinical Study 17-076 report available upon request.)