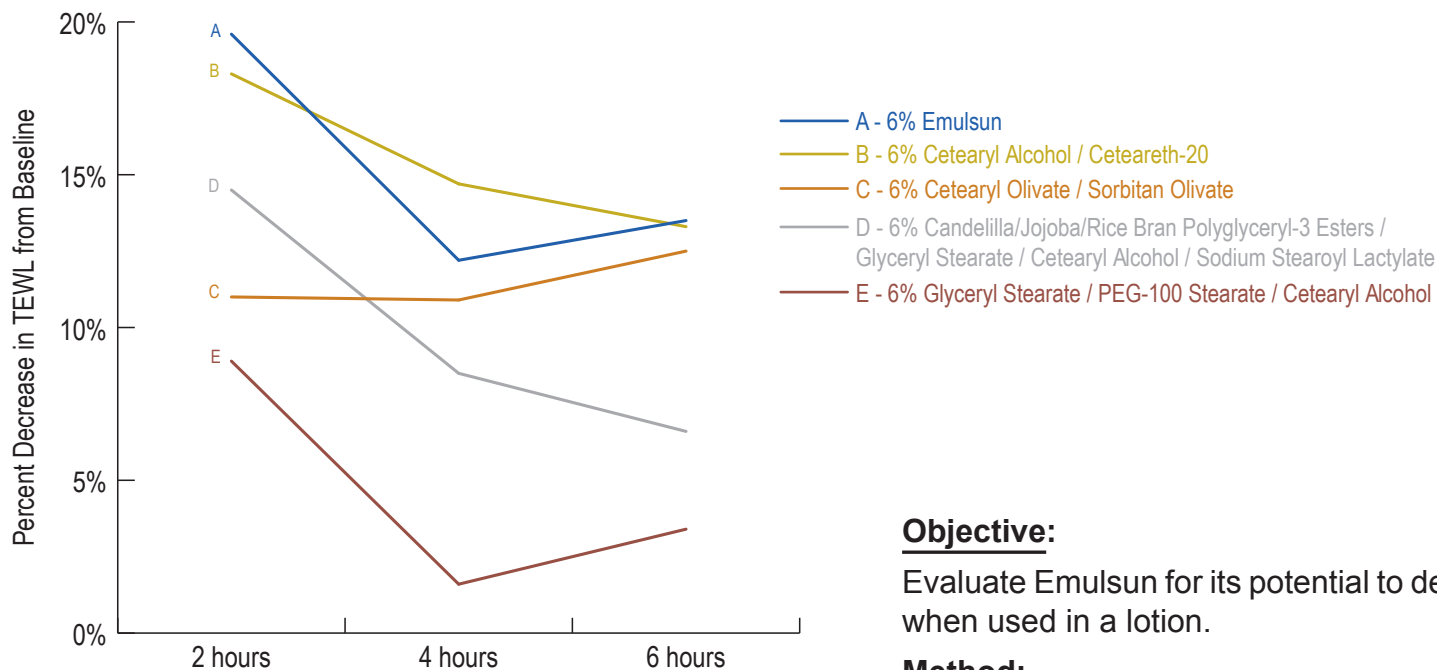




Emulsun Decreased TEWL More Than Other Emulsifiers

Barrier Function



Objective:

Evaluate Emulsun for its potential to decrease transepidermal water loss (TEWL) when used in a lotion.

Method:

TEWL measurements using a Tewameter were taken at baseline and every other hour for 6 hours after a single test article application.

Results:

The lotion containing **6% Emulsun decreased TEWL up to 6.4 times more** than other emulsifiers.

Vehicle Lotion (%wt/wt): Water (q.s.), Caprylic/Capric Triglyceride (4.7%), Jojoba Esters (4.7%), Isononyl Isononanoate (3.5%), Ethyl Macadamiate (2.3%), Helianthus Annuus (Sunflower) Seed Oil (2.3%), Macadamia Integrifolia Seed Oil (2.3%), Glycerin (2.0%), Phenoxyethanol (and) Caprylyl Glycol (and) Decylene Glycol (0.6%), and Aminomethyl Propanol (q.s.). (20% oil phase)

Floratech Ingredient: Emulsun

The clinical study of Floratech® test formulation (CTL_16-065 - Emulsun) was conducted on a panel of 18 female subjects, ranging from 30 to 59 years of age (mean age = 48). The duration of the study was 4 days (including the 3 day washout) with 1 application of each test article made to the outer lower leg. 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 article with Emulsun resulted in a statistically significant ($p < 0.05$) decrease in TEWL from baseline, as compared to Glyceryl Stearate / PEG-100 Stearate / Cetearyl Alcohol at all evaluation points post test article application, and as compared to Cetearyl Oliviate / Sorbitan Oliviate at the 2 hour evaluation point post test article application. (Clinical Study 16-065 - Emulsun - Phase I report available upon request.)