



Tradename: ABS Colloidal Oat PF

Code: 10116PF

CAS #: 84012-26-0

Test Request Form #: 1834

Lot #: 41652

Sponsor: Active Concepts, LLC; 107 Technology Drive Lincolnton, NC 28092

Study Director: Erica Segura

Principle Investigator: Maureen Danaher

Test Performed: Skin Conditioning Assay

Introduction

An *in-vivo* study was conducted over a period of two weeks to evaluate the ability of **ABS Colloidal Oat PF** to enhance barrier function through reduction in Transepidermal Water Loss (TEWL) and increase in moisturization. Results indicate that this material is capable of efficiently increasing hydration and reducing TEWL which allows moisture retention.

The Skin Conditioning Assay was conducted to assess the moisturizing ability of **ABS Colloidal Oat PF**.

Materials

A. Equipment: DermaLab Skin Combo (Hydration/ Moisture Pin and TEWL Probe)

Methods

Ten volunteers M/F between the ages of 23 and 45 and who were known to be free of any skin pathologies participated in this study. A Dermalab Combo was used to measure TEWL and hydration on the subject's volar forearms. The TEWL instrument consists of a probe that is based upon the vapor gradient with an open chamber. This open chamber design maintains the free natural evaporation from the skin without interfering with the environment over the measurement area. This ensures unbiased and accurate readings. Operation of the water loss module is fully menu drive, allowing for pre-setting and standard deviation or measurement time. Baseline TEWL readings were taken on day one of the study.

The moisture module provides information about the skin's dryness or hydration by measuring the conducting properties of the upper skin layers when subjected to an alternating voltage. The method is referred to as a conductance measurement and the output is presented in the unit of uSiemens (uS).

A moisture pin probe is the tool used to gather hydration values. Furthermore, skin texture (flakiness and roughness) is measured by each participant rating perceived skin improvements on a scale of 1-10; 1 being the worst/most dry; 10 the best/smoothest.

Following initial measurements, all subjects were asked to apply 5milligrams of each test material on their volar forearms. Measurements were taken prior to application of the test materials and then weekly for two weeks. The test material consisted of 2% **ABS Colloidal Oat PF** in a base lotion (Cetaphil Moisturizing for All Skin Types).

Results

In-vivo Study of Skin Conditioning over 2 Weeks

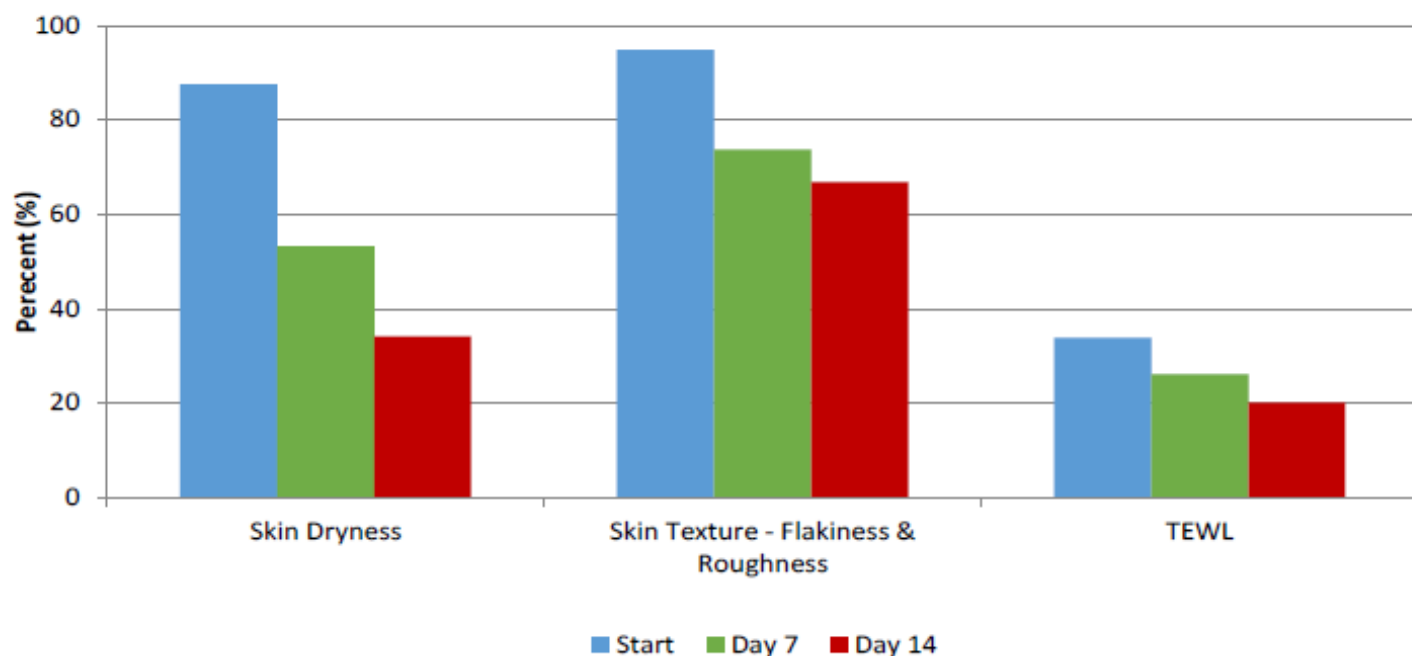


Figure 1. Skin Conditioning over a two week period



Discussion

As shown in figure 1, **ABS Colloidal Oat PF** was able to objectively decrease skin dryness by 65% over a period of two weeks, in turn resulting in enhanced moisture content. Additionally, skin texture (in regards to flakiness and roughness) saw a decrease of 25% over the same period. Lastly, transepidermal water-loss (TEWL) was also found to be affected. Over a period of two weeks, 2% **ABS Colloidal Oat PF** decreased TEWL by 15% from baseline indicating that this material is capable of efficiently increasing hydration and reducing TEWL to allow for moisture retention.