



Tradename: AC Wheat Hydrolysate PF

Code: 20615PF

CAS #: 70084-87-6 (or) 94350-06-8 (or) 73049-73-7

Test Request Form #: 2510

Lot #: 47470P

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

Study Director: Maureen Danaher

Principle Investigator: Jennifer Goodman

Test Performed:

Moisturization/ Hydration Assay

Introduction

An *in-vivo* study was conducted over a period of two weeks to evaluate the moisturization benefits of **AC Wheat Hydrolysate PF**. 20 M/F subjects between the ages of 23-45 participated in the study. Results indicate that this material is capable of significantly increasing hydration over time.

The Moisturization Assay was conducted to assess the moisturizing ability of **AC Wheat Hydrolysate PF**.

Materials

A. Equipment: DPM 9003 Novameter (NOVA Technologies).

Methods

The DPM 9003 Novameter (NOVA Technologies) is a capacitance instrument that measures skin impedance and is designed to provide a non-invasive, objective, reproducible method of measurement to quantify relative hydration of the skin. The standard probe has two parallel brass ring electrodes separated by an isolator (with inner and outer diameters of 4.34mm and 8.76mm and an inner and outer electrode distance of 1mm). The instrument works by integrating measurements at different frequencies of the applied alternating electrical current at preselected variable frequencies of up to 1 MHZ. Capacitance values are then calculated from the phase delay of the signal.

10 volunteers M/F between the ages of 23 and 45 and who were known to be free of any skin pathologies participated in this three week study. The DPM 9003 Novameter (NOVA Technologies) measures the relative hydration or moisturization of the skin. The presence of moisture in the skin improves conductance and therefore results in higher readings than dry skin. Therefore the higher the levels of moisture, the higher the readings will be. Baseline moisturization readings were taken on day one of the study.

Following initial measurements, all subjects were asked to apply 2 mg of each test material on a designated treatment area surrounding their mouths and eyes twice daily for three weeks. The test material consisted of 2.0% **AC Wheat Hydrolysate PF** in a base (Cetaphil Base Lotion).

Results

AC Wheat Hydrolysate PF showed very high moisturizing capabilities at a 2.0% concentration

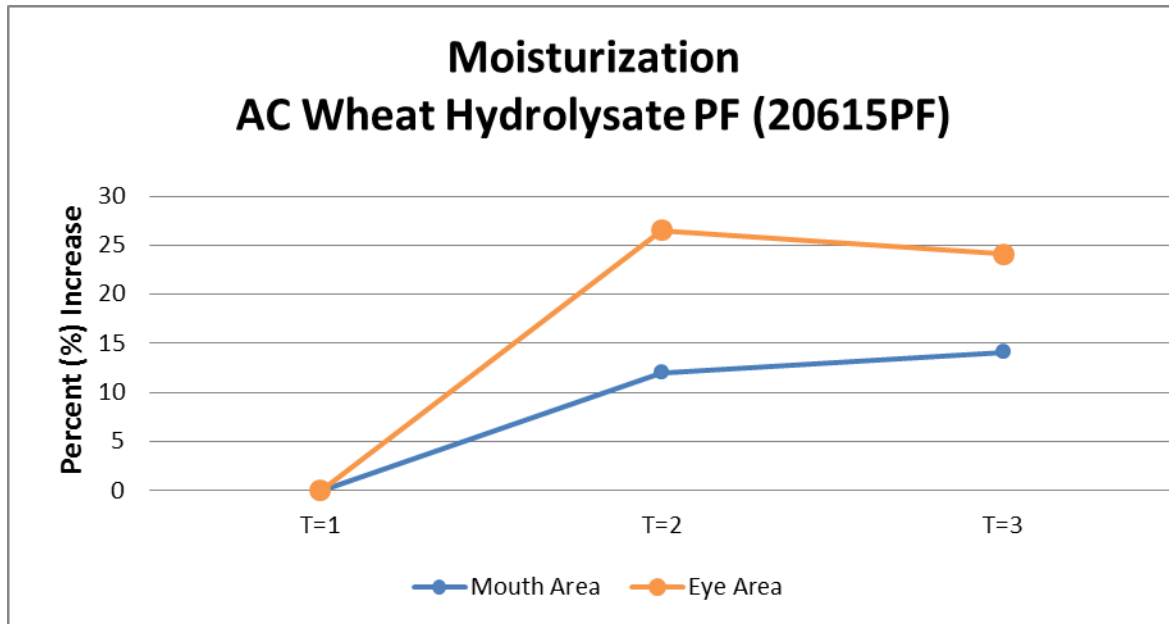


Figure 1. Improvements in moisturization with AC Wheat Hydrolysate PF

Discussion

As evidenced in a hydration efficacy study of **AC Wheat Hydrolysate PF** on skin in the more sensitive mouth and eye regions, moisture levels were improved and maintained over three weeks when compared to the baseline results. On average, after three weeks, 2.0% **AC Wheat Hydrolysate PF** improved skin hydration by as much as 25% when compared to baseline hydration values and by 8.0% when compared to the test vehicle. **AC Wheat Hydrolysate PF's** specific amino acid composition aids in the improving of the elasticity and skin texture through hydration. This is very important when looking at well-known problem areas such as the mouth and eyes where fine lines and wrinkles can appear and become very prominent. These findings support the use of **AC Wheat Hydrolysate PF** in personal care applications designed to enhance hydration levels in the sensitive skin areas such as the mouth and eyes.