



Moisturization/Hydration Assay

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Tradename: AC Hyalurosome

Code: 26001

CAS #: 9006-65-9 & 8002-43-5 & 68554-70-1 & 9004-61-9

Test Request Form #: 1836

Lot #: 37110P

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

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Test Performed:

Moisturization/ Hydration Assay

Introduction

An *in-vivo* study was conducted over a period of four weeks to evaluate the moisturization benefits of **AC Hyalurosome**. 10 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 compared to the positive control, hyaluronic acid.

The Moisturization Assay was conducted to assess the moisturizing ability of **AC Hyalurosome**.

Materials

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

Methods

The moisture module provides information about the skin's 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.

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 study. A Dermalab Corneometer was used to measure the moisture levels on the subject's volar forearms. The Corneometer is an instrument that measures the amount of water within the skin. The presence of moisture in the skin improves conductance therefore results in higher readings than dry skin. Therefore the higher the levels of moisture, the higher the readings from the Corneometer will be. Baseline moisturization readings were taken on day one of the study.

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Following initial measurements, all subjects were asked to apply 2 mg of each test material on their volar forearms. Measurements were taken immediately after application of test materials at 2 hours, 4 hours, 6 hours, 8 hours, and 10 hours. The test material consisted of 2.0% **AC Hyalurosomes** in a base lotion (Cetaphil Moisturizing for All Skin Types).

Results

AC Hyalurosomes showed very high moisturizing capabilities at a 2.0% concentration. Please note, each value is an average of three consecutive readings per test site.

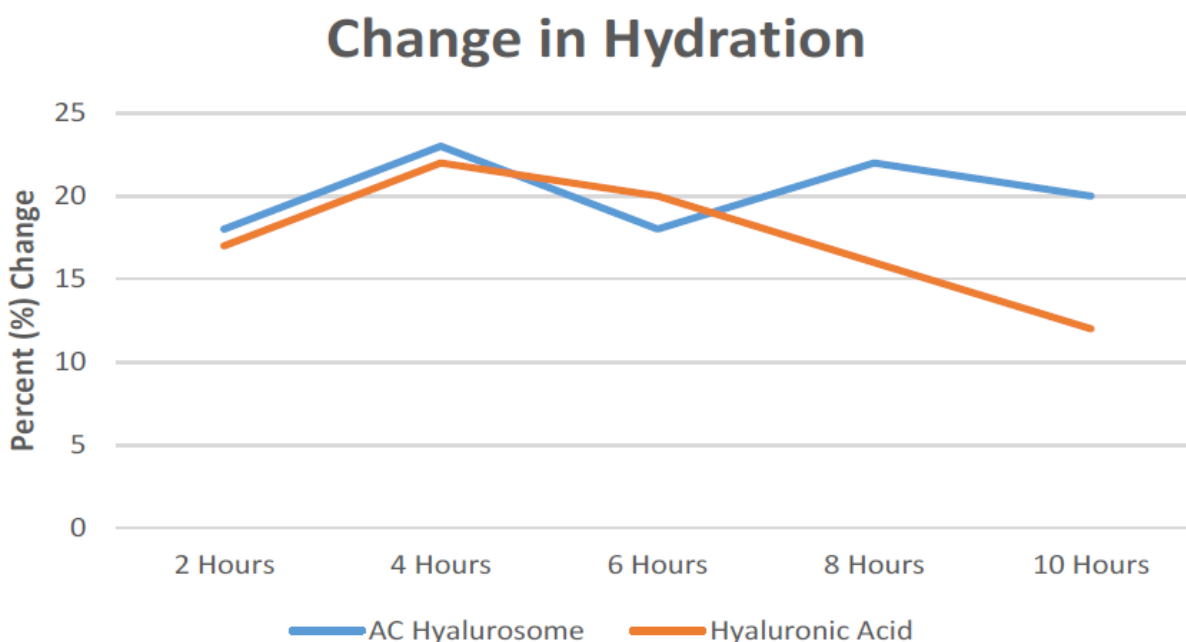


Figure 1. Moisturization over time

Discussion

As evidenced in a hydration efficacy study of **AC Hyalurosomes** on skin, moisture levels were improved and maintained over 10 hours when compared to the positive control. **AC Hyalurosomes** is able to deliver time sensitive moisturization for a period that far exceeds that of traditional industry standard Hyaluronic acid. This time delayed release indicates that **AC Hyalurosomes** is one of the most potent and effective moisturizing agents when compared to market standards.