**AC MVS Lips**

**BACKGROUND**
Plump, firm lips are one of the de rigueur fashion accessories of the moment. This trend exists not only in aging populations but also among an increasingly younger demographic. Today, consumers expect to be able to obtain cosmetic surgery-type effects from topical cosmetics. In order to achieve this, we need to look at the injectable preparations available to medical professionals.

Perhaps the most commonly used products are either purified collagen or reconstituted Human Tissue Matrix (HTM) to augment the naturally occurring lip tissue. The question becomes how does one best deliver collagen into the lips? Most lip preparations are lipid-based, eliminating the possibility of traditional systems such as liposomes. Due to the absence of follicles on the lips themselves, solid particulate delivery systems are inefficient.

**SCIENCE**
In order to overcome these problems, we have developed **AC MVS Lips**, a self-assembling micro-scale delivery system. The phospholipids are dispersed in a biomimetic fractionated Soybean extract that enables the product to be easily incorporated into the lipophilic environment of a traditional lip product. However, upon application to the lips, the phospholipids naturally seek to migrate to the more hydrophilic environment of the lip’s interior. When in the hydrophilic environment the phospholipids naturally assemble into a multivesicular system that swells to give the lips the appearance of increased volume.

**Benefits of AC MVS Lips:**
- Immediate and Long Term Benefits
- Hydrating and Moisturizing
- Sensorially Perceivable Benefits
- Lip and Skin Plumping

**INCI Name**: Glycine Soja (Soybean) Seed Extract & Glycyrrhiza Glabra (Licorice) Leaf Extract & Phospholipids
**INCI Status**: Approved
**REACH Status**: Complies
**CAS Number**: 9010-10-0 & 84775-66-6 & 123465-35-0
**EINECS Number**: 232-720-8 & 283-895-2 & N/A

**Origin**: Botanical
**Processing**: GMO Free
- No Ethoxylation
- No Irradiation
- No Sulphonation
**Additives**: Preservatives: None
- Antioxidants: None
- Other additives: None
**Solvents Used**: N/A
**Appearance**: Amber Viscous Oily Liquid
**Soluble/Miscible**: Oil Soluble
**Ecological Information**: 86.95% Biodegradability
**Microbial Count**: < 100 opg, No Pathogens
**Suggested Use Levels**: 2.0 - 15.0%
**Suggested Applications**: Moisturizing, Plumping, Sensorial, Natural Delivery System

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**BENEFITS**
Licorice root extract has been shown to increase the rate of wound healing, which directly involves the generation of new collagen fibrils. The rationale for the incorporation into AC MVS Lips is to induce the generation of new collagen, supplementing the collagen already present in the lips, naturally complementing the function of the self-assembling vesicles.

**EFFICACY**
One of the most impressive benefits AC MVS Lips is able to offer is lip plumping. The main characteristics of plump, voluptuous lips are their elasticity and level of moisturization. AC MVS Lips is able to offer both in spades. As seen in Figure 1, AC MVS Lips is able to offer long term perceivable moisturization over time compared to control lotions in laboratory testing. Offering as much as 35% more moisturization than controls, AC MVS Lips is invaluable as a moisturizing agent.

![Graph showing Average Moisturization over time](image)

**Elasticity**
Elasticity is an excellent measure for a number of common aging symptoms such as fine lines, wrinkles, sagging skin, and many of the perceivable sensory feelings that come with aging. AC MVS Lips was able to increase skin elasticity (VE) by nearly 45% over the course of four weeks.

![Graph showing Elasticity over time](image)
AC MVS Lips

An in-vivo sensory study was performed to evaluate the ability of AC MVS Lips to effectively plump the lips and create fullness. A 5-subject panel was assembled of 10 women between the ages of 18 and 36. At random, women were either given a sample of the control sunflower oil to apply to the lips or given a sample of 3.0% AC MVS Lips in a solution of sunflower oil.

The women applied directly to their lips. Each woman was asked to assess the length of time needed to achieve a perceivable plumping effect. As a means to pre-condition the test site, each panelist abstained from using any lip care products for three days before the sensory study commenced. During the sensory study, no adverse or unexpected reactions were observed on any of the subjects.

The study concluded after 5 minutes. The results indicate that a perceivable lip plumping effect is attainable within 5 minutes following application of AC MVS Lips. The data suggests that using 3.0% of AC MVS Lips in a cosmetic lip formulation will indeed result in perceivable lip plumping effects within five minutes of application.

![Sensorial Study](image)

**Figure 3.** Sensorial Perception of Lip Plumping Effects

References
