

# SalSphere® Clear Skin (SS CS)

Technology that reduces and prevents skin irregularities and blemishes.



### **UNIQUE FEATURES**

# 1 POWERFUL AGAINST **BLEMISHES**

Combines the power of the alphahydroxy acid, lactic acid (LA), and the beta-hydroxy acid (BHA), salicylic acid, for the most effective solution.

#### 2 TARGETED DELIVERY

SalSphere® technology is designed to deliver the functional ingredients where they are needed most, due to its adhesive properties.

# **3** GENTLE, SLOW RELEASE With controlled release technology, SS CS is gentle on the skin and

suitable for users with sensitive skin.

SalSphere® Clear Skin is designed to enable formulation with acids, such as AHAs and BHAs, and to prevent dryness and irritation caused by the low рН.

**TECHNOLOGY** 

SS CS is a sub-micron technology that encapsulates the LA and SA (Figure 1). When a product containing SS CS is applied to the skin, it adheres and partitions into the upper layer of the epidermis where it slowly dissolves and release the acids.



### **FUNCTIONAL INGREDIENTS**

Alpha-hydroxy acids (AHAs) such as LACTIC ACID work at the upper epidermal layer to loosen dead skin cells and promote skin cell turnover. Lactic acid also moisturizes the skin and stimulates collagen production to leave skin looking supple and rejuvenated.

Beta-hydroxy acids (BHAs) such as SALICYLIC ACID exfoliate the skin and clear clogged pores to promote healthier, clearer skin. After several months of daily use, BHA can even decrease the appearance of wrinkles and age spots.



acid and salicylic acid infused within the core.





# SalSphere® Clear Skin (SS CS)

Technology that reduces and prevents blemishes and other skin irregularities.

### SUITABLE FOR SENSITIVE SKIN

A lotion containing SS CS was compared to a lotion containing the acids in free form (Figure 3). Skin pH was measured at each application site and on bare skin for six hours. The site treated with the lotion containing free acids immediately dropped to a pH of 3.5 and was unable to re-balance itself over the six hour time period. In contrast, the site treated with SS CS lotion remained in the skin-friendly range of 4.5-5.5.

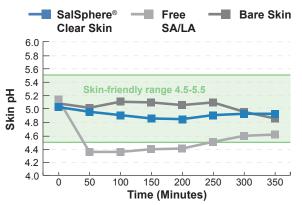
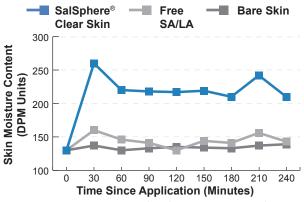


Figure 3: Skin pH measurements over a six-hour period. The pH was measured using a Hanna® HI 99181 pH meter.

### SUPERIOR SKIN MOISTUR-IZATION

A lotion containing SS CS was compared to the free acids over four hours (Figure 4). Following the initial increase in moisture due to the lotion base itself, the SalSphere® technology clearly outperformed the nonencapsulated acids. The free acids did not impart any significant moisture to bare skin.



**Figure 4:** Moisture content of skin following the application of a lotion containing SS CS compared to a lotion containing the free acids.

### **FORMULATION**

### Face Wash

Ingredients	(W/W %)
SalSphere® Clear Skin	10.0
Xanthan Gum	0.93
Glycerin	4.5
Cocamidopropyl Betaine	35.0
DI Water	39.57
Citric Acid (and) Water	q.s.
Sodium Lauroyl Sarcosinate	9.0
Preservative	1

### TECHNICAL DATA

Appearance @ 20°C	Translucent fluid
Applications	Daily skin care products such as face and body washes, lotions, toners, and gels
Color	Light amber
Odor	Odorless
Shelf Life (months)	4-6
Usage Level (wt%)	Up to 10
Storage (°C)	Closed container at 12-32°