

## SalSphere® Salicylic Acid (SS SA)

*A time release delivery system for salicylic acid (SA) to rejuvenate and restore your skin.*

Time release of salicylic acid (SA), a beta hydroxy acid, is best known for the treatment of dermatitis, acne, psoriasis, calluses, and more. SA works as a keratolytic, comedolytic, and bacteriostatic agent, causing the cells of the epidermis to shed more readily, opening clogged pores, and neutralizing bacteria within.

SS SA makes this poorly-soluble ingredient easy to use in water and alcohol-free formulations. SS SA enables formulation of SA in rinse-off and leave-on formulations for acne, exfoliation, dandruff, wart removal, and more.

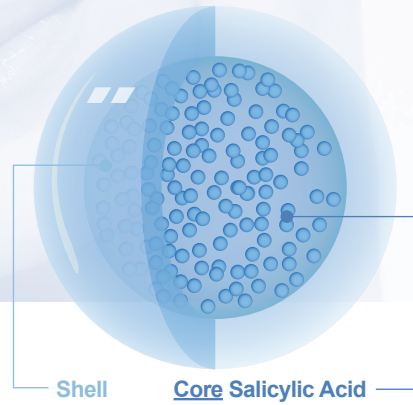
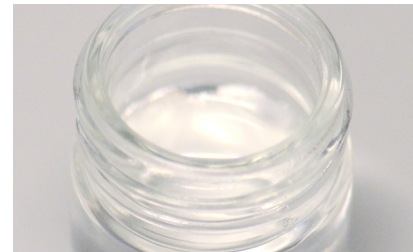
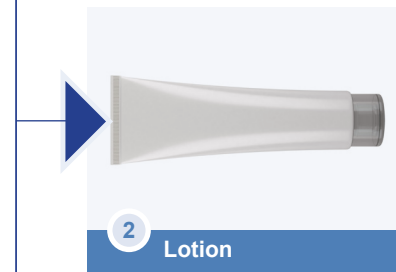


Figure 1: SS SA is composed of sub-micron spheres, in which SA is encapsulated.



SS SA raw



### UNIQUE FEATURES

- 1 **FORMULATION READY**  
in water-based emulsions.
- 2 **SUSTAINED RELEASE**  
skin-friendly, can be used for sensitive skin.
- 3 **CLEAR APPEARANCE**

### HOW THE TECHNOLOGY HELPS YOU

SS SA is composed of sub-micron spheres (Figure 1), in which SA is encapsulated. The mechanism of release is based on adhesion of the sphere to the lipid domains on the pimple and then the slow release of SA.

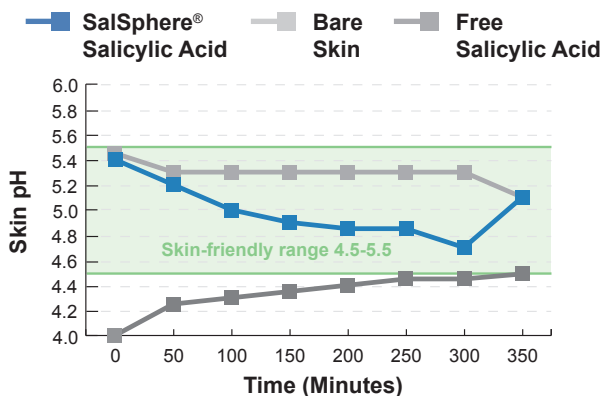
# SalSphere® Salicylic Acid (SS SA)

A time release delivery system for salicylic acid (SA) to rejuvenate and restore your skin.

## SUITABLE FOR SENSITIVE SKIN

Delivering the SA in this controlled fashion allows the skin to maintain a 4.5-5.5, which is considered safe (Figure 2).

Figure 2: Skin pH stays above 5 after treatment with SalSphere® technology, while free SA causes the skin pH to drop below 4.5, meaning greater potential for irritation and dryness. The pH was tested with Hanna HI 99181 skin pH meter.



## LONGER-LASTING ON SKIN

The percentage of SA remaining on the skin was compared between two lotions, one containing SS SA and one containing free SA (Figure 3).

This study shows that SS SA is effective at retaining more SA on the skin, thus enhancing efficacy. The technology provides a combination of safety, skin-friendliness, and efficacy.

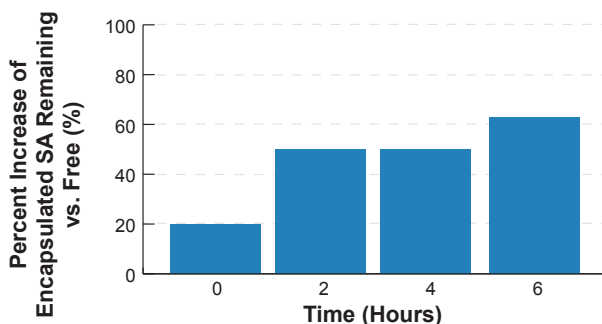


Figure 3: Percent difference of SS SA left on skin as compared to free salicylic acid.

## APPLICATIONS FOR BETTER SKIN

**Chemical peels:** SS SA is used for chemical peel procedures with levels of 20 and 30% SA. Chemical peels are helpful for a variety of skin conditions and reduce the dead skin and debris that result in blackheads, whiteheads, and acne.

**Warts:** A wart is a small, rough growth of a solid blister. Topical treatments containing SA are very effective.



## FORMULATION

Ingredients	(W/W %)
SalSphere® Salicylic Acid	6.67
Salvona Pre-Mix A #5068	25
DI Water	67.33
Preservative	1

## TECHNICAL DATA

<b>Appearance @ 20°C</b>	Translucent liquid
<b>Applications</b>	Cleansers, lotions, and creams, foot care (warts)
<b>Color</b>	Light to dark amber
<b>Odor</b>	Characteristic
<b>pH (1% Solution)</b>	5.5 ± 1
<b>Shelf Life (months)</b>	36
<b>Usage Level (wt%)</b>	Cosmetic: Up to 1.67 OTC: 1.67-6.67 Rx: Over 6.67
<b>Storage (°C)</b>	Closed container at 12-32°