



HydroSal® SaSilk (HS SLK)

A technology to reverse the signs of hair aging.

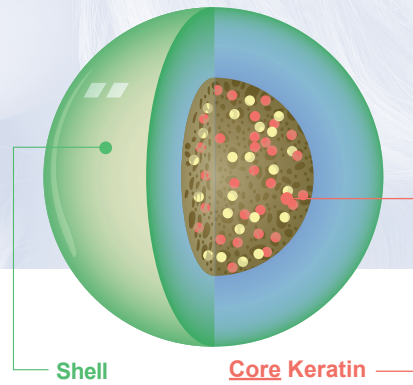


Figure 1: Structure of HS SLK.

HS SLK restores natural shine, repairs damage, helps maintain healthy hair appearance, and battles thinning hair. Thinning hair is problem during aging for women and men everywhere, especially women in the post-menopausal phase of their life.

UNIQUE FEATURES

- 1 NOTICEABLY HEALTHIER HAIR**
Makes hair look thicker and smoother, with vibrant natural shine, silkiness, and greater manageability.
- 2 ENVIRONMENTALLY SAFE**
and hair-friendly. Provides thermal protection and adds volume while minimizing frizz.
- 3 SUITABLE FOR DAILY USE**
at home with salon-quality results. Can be used in shampoos, conditioners, serums, and more.



HS SLK PROVIDES

- 1** Stronger hair
- 2** More volume
- 3** A salon-quality straightening treatment
- 4** Protection from heat-styling damage
- 5** Glossiness, for up to six washes
- 6** Reduction of frizz (caused by humidity)
- 7** A formaldehyde-free and environmentally safe treatment

HOW THE TECHNOLOGY HELPS YOU

HS SLK is a sub-micron sphere designed to deliver keratin (Figure 1). The keratin is infused within the porous core, which is encapsulated by a polymeric shell. The shell is designed to enhance adhesion of keratin complex to the hair and prolong its benefits.



HS SLK raw



HydroSal® SalSilk (HS SLK)

A technology to reverse the signs of hair aging.

USING KERATIN IN HAIR PRODUCTS

Keratin is a natural protein that acts as a key structural component of hair and provides its overall healthy appearance. Age and exposure to chemicals depletes keratin.

Replenishing hair with keratin is not simple. Keratin does not readily adhere to hair without being chemically processed with chemical cross-links such as formaldehyde, which is a toxic substance. HS SLK offers a new technology for replenishing hair with keratin.

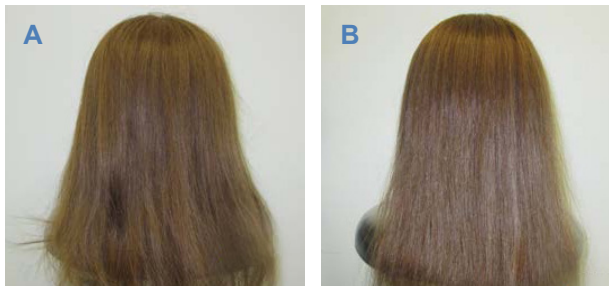


Figure 2: Before (A) and after (B) application of a HS SLK rinse-off conditioner. HS SLK technology coats and seals the hair shaft, which provides immediate protection and lasting shine.

INCREASED HAIR THICKNESS

HS SLK coats the hair shaft, resulting in increased hair thickness and making it look healthier, stronger, and fuller (Figure 3).

A study was done to determine the benefit of HS SLK when used in a rinse-off hair conditioner application as compared to free keratin and a market product (Goldwell Kerasilk) (Figure 4). The results show that the diameter of hair strands treated with HS SLK increased **six-fold** compared to free keratin, while the market product resulted in a decrease in hair thickness of approximately 85 microns.

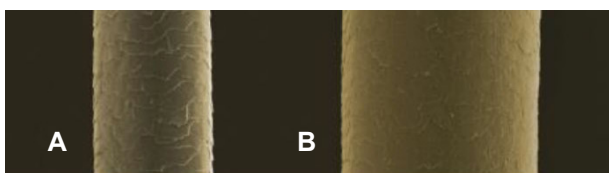


Figure 3: SEM picture of untreated hair strand (A) and HS SLK treated hair strand (B).



Figure 4: Average change in thickness of hair strands post-rinse after treatment from rinse-off applications (n=10).

FORMULATION

Ingredients	(W/W %)
HydroSal® SalSilk	5
SalSphere® Hair Stimulator	2
SalSphere® Natural Hair Growth Promoter	2
HydroSal® SalCool	1
Salvona Pre-Mix CW #5018	30
DI Water	60

TECHNICAL DATA

Appearance @ 20°C	Opaque liquid
Applications	Suitable for hair care products such as sprays, conditioners, shampoos, and serums
Color	White
Odor	Characteristic
pH (1 % solution)	5.0 ± 1.0
Shelf Life (months)	18
Usage Level (wt%)	12.5-5%
Storage (°C)	Closed container at 12-32°