



ENCAPSULATION TECHNOLOGIES

SalSphere® Hemp Seed Oil (SS HSO) • #8422

Delivery of ultra light moisturizing to maintain healthy skin from hemp seeds

PRODUCT OVERVIEW

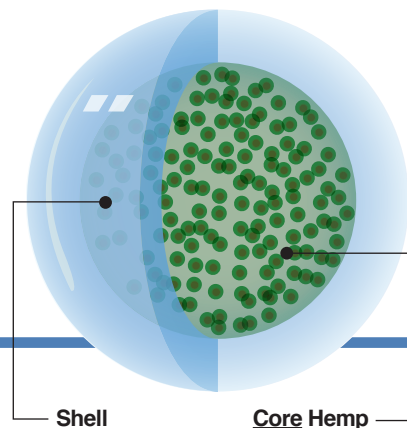


Figure 1: The sub-micron structure of SalSphere® Hemp with its core encapsulating the CBD.



SalSphere® Hemp Seed Oil is a technology to stabilize and deliver concentrated hemp seed oil (also referred to as “hemp nuts” or “hemp hearts”) for skin wellness, deep moisturizing, soothing, reducing signs of skin aging.

It has been a major challenge to deliver functional ingredients, like essential fatty acids, that are nourishing, deep hydrating and light to mature and dry skin from trendy Hemp. SS HSO is offering a solution to deliver very potent essential oil, proteins and vitamins as a natural complex in a form that is ultra light on the skin.



Figure 2: SS HSO virgin with natural greenish tint

Major Benefits of SalSphere® HSO



Natural potent complex that is beneficial to the skin and hair. The technology enhances the compatibility of HSO in water.



Encapsulation provides protection from oxidation and degradation (discoloration)



Time release and enhanced bioavailability with ultra light texture

Hemp Seed Oil (HSO) and its Beneficial Properties

Hemp seed oil comes from the seeds of the *Cannabis sativa* plant. The seeds do not contain the same levels of compounds as the plant itself, but they still have a rich profile of the following useful bioactive compounds:

ESSENTIAL FATTY ACIDS (EFA)

High level of unsaturated EFA. They need to be applied on to the skin. They support cell membrane stability, inflammatory regulation, immune response and general youthful appearance.

GAMMA LINOLENIC ACID (GLA)

High quantities of concentrated gamma linolenic acid or GLA. GLA is known to reduce inflammation, and treat eczema.

VITAMIN E

Rich in the fat-soluble antioxidant, vitamin E and its group of compounds that include tocopherols. Vitamin E is helpful for moisturizing and renewing the hair and skin. It additionally serves to guard against the damaging effects of free radicals from the environment.

OMEGA 3:6 FATTY ACID

Hemp seed oil has a special ratio of 3.5 to 1 of omega-6 to omega-3. This is beneficial for skin health and appearance.



Figure 3: Hemp seeds



Figure 4: Encapsulated HSO is available in syringes or larger volume production.

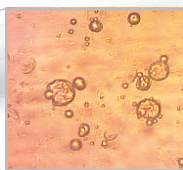


Figure 5: Microscopy image of SalSphere® Hemp Seed Oil

SalSphere® Technology

Submicron spheres made of a solid core, (Figure 1) made out of natural lipids and infused with the hemp seed oil. The surface of the spheres is embedded with hydrophilic ingredients that promotes its suspension in water and also helps to adhere the spheres onto the skin. The unique structure forms a slurry that is fluid and compatible with most topical formulations (Figure 7).

SS HSO utilizes raw unrefined HSO, which is rich with nutritional benefiting ingredients. The encapsulated HSO forms a suspension with small particles sizes (Figure 6) that is stable. SS HSO improves the compatibility of HSO with water. It allows the dispersion of HSO (Figure 7).

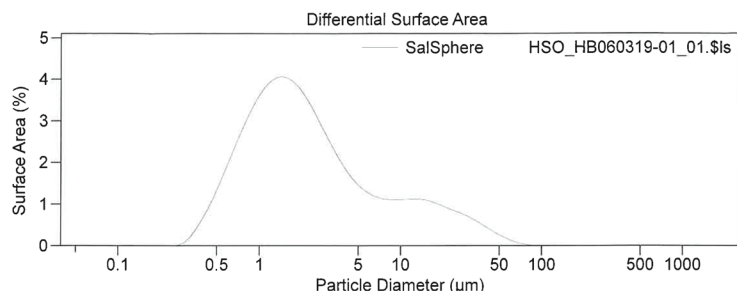


Figure 6: Particle size analysis of SS HSO showing an average diameter of over 1 micron using the Beckman Coulter LS Particle Size Analyzer.

SS CBD HSO, INCI

Hemp Seed Oil, DL-Alpha Tocopherol, Cholesterol, Isononyl Isononate, Glyceryl Stearate, Hydroxyl Alcohol, Hydroxystearyl Glucoside, Lactic Acid, Brassicyl Isoleucinate Esylate, Brassica Alcohol*, Rice Sugar, Xantham Gum, Aqua, Propanediol, Sodium Citrate Dihydrate, Phenoxyethanol, Ethylhexylglycerin*

*can be modified

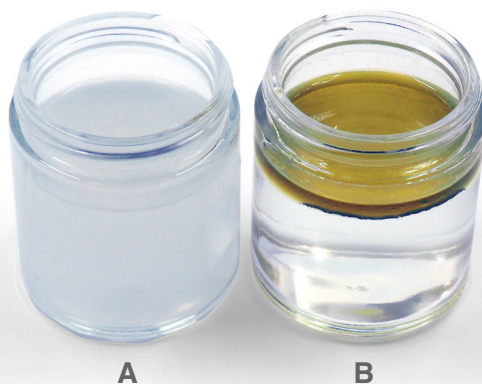


Figure 7: Demonstration of compatibility of SSSHO with water.
A: SalSphere® HSO Encapsulated Hemp Seed Oil totally dispersed.
B: Hemp Seed Oil separated from water.

Where to use SS HSO for Skin & Hair Care

Daily moisturizing: SS HSO free can be easily solubilized into formulations. It contains a number of fatty acids which are very healthy for the skin. These fatty acids nourish and moisturize your skin in the right manner and sufficient amount. This is an herbal extract and has almost no side effects.

Acne prone skin: The vitamins and fatty acids in this oil may help keep the skin healthy and prevent breakouts. Research found that topical applications strengthens the skin and makes it better able to resist infection. It may help balance the skin and prevent inflammation that is associated with acne. It's being used on acne prone skin as a cleanser and moisturizer. SS HSO won't clog up the pores when used. The best way to use SS HSO is in oil cleansing method or as a facial moisturizer.

Skin massage: Gives a healthy and rich skin which looks younger and healthier. It can help renew and heal the skin because it contains high levels of the same compound as the skin oil, linoleic acid.

Anti-aging: Natural moisturizing treatment, which can be applied after a shower or bath. It nourishes the skin and increases the blood circulation.

Treat cracked, dry skin: It may be rubbed directly onto the skin.

Makeup Remover: It's a soft and non-harsh way to get rid of your excess make-up. SS HSO is delicate on the skin and can bind to the cosmetic particles to remove them safely, even waterproof make-ups.

Hair Care: There are many hair health benefits of HSO as well. SS HSO can be formulated into commercial and herbal hair products like shampoos, hair oils, conditioners, etc. Like the skin care, massage with SS HSO containing products can improve blood circulation in the scalp. Washing hair with hemp oil shampoos and conditioners can thicken the hair texture and keep the scalp away from dandruff. Random evidence indicates that loss of hair is also reduced by using SS HSO and scalp infections and issues are kept away.

Contact a Salvona representative for formulation tips and Advanced Beauty Labs for finished products based on SalSphere® HSO.