sensé FAQs

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Self-Preserving Technology Summary

What is a "preservative?"

Cosmetic preservatives are those chemicals added with no other function in the formula other than to keep the product from spoiling. Because many personal care products today are water-based, they provide an inviting medium for microbial growth unless precautions are taken. Spoilage occurs when bacteria, moulds, yeast or other microorganisms find their way into the product and spread unchecked. Contamination of products can occur at two points: 1) during manufacturing; and 2) during use by the consumer. Traditional chemical preservatives used in products today include:

1. Parabens (methyl, ethyl, propyl, and butyl)
2. Formaldehyde
3. Quaternium 15
4. Diazolidinyl urea
5. Imidazolidinyl urea
6. DMDM Hydantoin
7. 2-bromo-2-nitropropane-1,3-diol
8. Sodium hydroxyglycinate
9. Phenoxyethanol
10. Sorbic acid / Potassium sorbate
11. Methylisothiazolinone
12. Methylchloroisothiazoline

Sensé products are not formulated with chemical preservatives, instead employing self-preserving ingredients to ensure pure, fresh product. And unlike many products on the market today, each Sensé product has passed extensive laboratory testing, demonstrating its ability to neutralize potential microbial contamination.

What is "Self-Preserving Technology?"

With self-preserving technology all of the functional ingredients of a formula as well as the manufacturing process and the packaging are combined using a patent-pending technology to become the preservative system. In other words, "the product is the preservative." In Sensé's "self-preserving" line of skin care products there are no biocides added exclusively to preserve the product. There are six "pillars" of self-preserving technology:

1. Water Activity
2. pH Control
3. Active Ingredients
4. Appropriate Packaging
5. Clean Manufacturing
6. Patent-Pending Liquid Crystals

How does "Self-Preserving Technology" work?

As enumerated above, Sensé formulas employ several "hurdles" to kill microbes that might spoil a product. These six hurdles include:

1. Water Activity. Microorganisms require available water in order to grow. We have selected botanical extracts and glycerin to bind water so that it is available to moisten the skin, but is not available to

microbes. This is the first hurdle microbes must jump over and some will be killed because they can't get the water they need to survive.

2. pH Control. Most microbes have an optimal pH for growth in a range of 5-8. Most have a difficult time surviving at pH levels below 5. Low pH (3.5-4.0) is another hurdle we use in a few of our products to keep them from spoiling.

3. Active Ingredients. As stated above, several ingredients in Sensé products have mild antimicrobial properties. This is a secondary function, as they perform unrelated critical functions in the formulas.

4. Packaging. Packaging and closures are a vital component in the success of any preservation system, including those using parabens or formaldehyde. We have improved Sensé packaging by discontinuing the use of open jars—instead using pumps or tubes. The change in the containers is designed to reduce the incidence of consumer contamination of the product.

5. Clean Manufacturing. Strong chemical preservatives can compensate for sloppy manufacturing. Many major cosmetics companies do not manufacture their own products, instead using numerous contract manufacturing plants. Because they don't control the manufacturing process, they must ensure a safe product by using strong chemical preservative systems. USANA manufactures Sensé exclusively in-house at a custom-designed plant unlike any other in the industry. This plant reduces potential contaminants to an absolute minimum through the use of HEPA air filtration systems, positive pressure filling and packaging rooms, water purification, and extensive testing of both raw materials and finished products.

6. Patent-Pending Liquid Crystals. USANA scientists developed a unique manufacturing process that allows for the formation of a liquid crystal of the lamellar, hexagonal, or cubic type. The liquid crystal then can be formed specifically to deliver either self-preserving components or botanical extracts. The delivery can be in the product itself or to the surface of the skin. This crystal matrix also contributes to the products' ability to preserve themselves.

Is "Self-Preserving Technology" an ingredient or blend that is added to every product?

No, self-preserved products must be uniquely formulated based on the product's purpose and the necessary functional ingredients required to deliver the desired benefits to the consumer. Self-preserving technology utilizes the same basic principles and a common patent-pending liquid crystal technology, but each product is preserved in its own unique way using the properties of the existing ingredients.

What is the technology with a patent pending?

USANA has applied for a patent to protect the process we've developed that allows for the formation of a liquid crystal of the lamellar, hexagonal, or cubic type. The liquid crystal then can be formed specifically to deliver either self-preserving components or botanical extracts. The delivery can be in the product itself or to the surface of the skin. With this technology it is no longer necessary to use these problematic chemicals: formaldehyde donors, benzalkonium chloride, parabens, DMDM Hydantoin, benzalkonium bromide, chlorhexidine, cetylpyridinium chloride, or thimerosal.

Does this mean the products have a limited shelf life and are not protected from microbial contamination?

No. Sensé's self-preserving products have the same two-year shelf life as competitors' products that use formaldehyde donors, parabens, or other chemical preservatives.

Are there ingredients that are both functional and anti-microbial?

Yes. Some ingredients serve more than one purpose. For example, some surfactants have anti-microbial properties, but their primary purpose is to impart foaming or cleansing properties to a product. Surfactants

therefore, are not preservatives in the classical sense of the word because they serve another primary function.

What are parabens?

Parabens is a generic word referring to a group of compounds derived from benzene (a known carcinogen [IARC 19821,b]). Examples of this class of compounds are methyl paraben, isopropyl paraben, ethyl paraben, butyl paraben, and isobutyl paraben. Parabens have been used for preservation since the 1950s, both for food and cosmetics. Generally more than one paraben is used to give broader biocidal and biostatic coverage than would be afforded by a single paraben. So the rule usually is: use more than one paraben in a product. USANA Founder Dr. Myron Wentz has been concerned about the use of parabens for some time, but their use has been justified by the desire to make sure the Sensé line is microbiologically safe. Since we now have the technology to make a self-preserving product without resorting to the use of parabens, that justification no longer exists.

I've heard of other products without parabens or other preservatives. Is this true?

USANA is the first company in the world that we are aware of to introduce an entire line of "self-preserving" formulas with a full two-year shelf life. There are other products, however, that claim to be "preservative-free." They fall into the following categories:

a) Truly Preservative-Free – Inconvenient to use and potentially unsafe. Like a jar of mayonnaise, these products require refrigeration, have short shelf lives, and require careful handling.
b) Botanical Extract Systems – Do not require refrigeration, but have short shelf lives due to their weak action. In our opinion, such products are "under-preserved" by providing some protection but may not provide sufficient broad-spectrum protection from all types of contaminants. USANA detected Staphylococcus aureus contamination in one leading brand which claimed to be preservative-free.
c) "Paraben-Free" – These products usually are free of paraben preservatives, but use other chemical preservatives that are less well known by consumers, such as sorbic acid.