

Natural Info - **A Viewpoint**



Natural Preservatives

An article by Sharon Kinnier ...

One day while washing my face with Dove Soap (that also contained ¼ cup of cleansing cream) I realized how dry my skin felt. It was almost instant. Standing there looking in the mirror I could see my skin drying out and becoming parched. I NEEDED the moisturizer to bring my skin back into some type of balance. I re-read the ingredients on the package and decided there had to be a better method. I could not understand most of the ingredients contained in the soap. I decided that I could do better.

Making the decision for whatever reason to go natural is an easy decision. Living with the decision in your everyday life becomes more difficult as you try to practice it. Finding completely natural skin care products on the commercial market is next to impossible. Most “Natural” products contain some type of chemical and/or synthetic that upon further study can cause harm to your body in some way. I believe that you can have 100% natural products that are preserved with natural ingredients.

The main reason it is difficult to find is because 99% of the companies on the market add some type of synthetic preservative to their products to maintain their shelf life for about two to three years. Without some type of preservative in the product, micro-organisms would multiply freely causing side effects such as skin rashes, blindness, and a multitude of other ailments. The downside of that is that

with synthetic preservatives you also take the risk of deliberately adding toxins to your body. These toxins have caused reactions such as allergic skin reactions and dermatitis just to name a few.

Most of the synthetic preservatives used today are carcinogenic and are thought to cause possible reactions. Some of this has been proven by the scientific community and much is still in debate. There are ways to preserve a product without having to add synthetics. There are essential oils, vitamin E, Honey, Lemon, Sugar and Salt to name a few.

If you have been following the natural trend you know that there are 2 camps: those that believe that there can be an alternative to synthetic preservatives that won't kill you or cause major side effects and the 2nd camp that believes that no matter what you must have a chemical preservative of some type regardless of the side effects. I ask the question of handcrafters: what makes you any different from the large companies out there offering "natural" products?

With ingredients such as essential oils and antioxidants that act as preservatives natural Skin care products can be produced with a limited shelf life. If you choose not to use any preservatives the products must be refrigerated immediately after opening. They will also have to be manufactured in a sterilized environment using something similar to a flow hood that is used in hospital and laboratory environments. The process to produce this is time consuming and costly. For large companies that make items in large batches this is not economically feasible. They are looking for a batch of products (which could be well over 10,000 bottles) to have a shelf life of 2-3 years. There are companies that now produce natural products in small batches using natural preservatives and that number is growing. This trend is growing because the educated consumer is now demanding natural products for face and body care.

[1] Essential oils are natural substances that are powerful preservatives, but are not extensively used to preserve cosmetic products. They are derived from flowers, leaves, grasses, and woody plants. The first indications of their antiseptic properties were uncovered during the cholera epidemics of the nineteenth century in France when tens of thousands of men, women, and children perished. During this time it was observed that workers in perfume factories were almost completely immune to this disease. Today we know that most essential oils and absolutes used in perfumes are powerful antiseptics that kill most of the harmful bacteria and fungi without harming the human system. The addition of as little as one drop of sweet orange oil to two ounces of cream will kill all bacteria and fungi in the preparation. Essential oils have also been shown to be effective in killing the virus that causes Herpes and

assist in healing the affected skin.

Effectiveness of Essential Oils in killing Bacteria

Essential oil	Minimum Amount in %	Essential oil	Minimum Amount in %
Thyme	0.070	Rosemary	0.430
Origanum	0.100	Cumin	0.450
Sweet Orange	0.120	Neroli	0.475
Lemongrass	0.160	Birch	0.480
Chinese Cinnamon	0.170	Lavender	0.500
Rose	0.180	Melissa Balm	0.520
Clove	0.200	Ylang Ylang	0.560
Eucalyptus	0.225	Juniper	0.600
Peppermint	0.250	Sweet Fennel	0.640
Rose geranium	0.250	Garlic	0.650
Meadowsweet	0.330	Lemon	0.700
Chinese anise	0.370	Cajeput	0.720
Orris	0.380	Sassafras	0.750
Cinnamon	0.400	Heliotrope	0.800
Wild Thyme	0.400	Fir, Pine	0.860
Anise	0.420	Parsley	0.880
Mustard	0.420	Violet	0.900

Recent studies performed in France determined the potency of essential oils as antiseptics. Increasing amounts of different essential oils were added to meat stock cultured in raw sewage to determine the quantity needed to kill all micro-organisms. The table above lists the amount of essential oil in percent that must be added to raw sewage to kill all microbes. As can be seen from the table, one part of origanum oil renders 1,000 parts of raw sewage free of all living organisms.

Sometimes essential oils which are used as preservatives can evaporate from the preparation when left uncovered. Some essential oils, if they are concentrated, also can cause reddening of the skin and dermatitis. Products with a larger content of essential oils, as found in aroma-therapeutic preparations (foam baths, soaps, bath oils, and massage oils), do not need the addition of harmful synthetic preservatives

because of the antiseptic properties of essential oils.

Neem Oil - Neem is one of the most powerful oils on the market today. It has been used in India since the time of Sanskrit. Today it is recognized as an all around oil. It is anti-fungal, anti-bacterial as well as anti-protozoan and a spermicidal.

Vitamin E (d-alpha Tocopherol) - Vitamin E is a powerful antioxidant used in preserving oils and keeping them from going rancid. Beware that there is a synthetic on the market called Tocopherol, Alpha Tocopherol and/or Tocopherol Acetate.

Salt - Most people have heard of Smithfield Hams. These hams can last forever. They are salt cured. Salt has been used, since ancient times, especially for meat, as a preservation technique for preserving foods. The salt enters the tissue and in effect binds the water, inhibiting the bacterium that causes spoilage. The salt restricts to tiny concentration and protects food from yeasts and molds. It draws out moisture and creates an environment inhospitable to bacteria. Salt has anion from hydrochloric acid. It is also known as sodium chloride.

Sugar - Sugar is an organic compound called carbohydrates. Sugar comes in 2 forms; refined and raw. The white sugar is refined and the raw sugar is brown and has a variety of names. It is used as a natural preservative. Sugar inhibits the bacterial growth after the food or products have been heated.

[2] Lemon - Lemon is part of the Rutaceae family also known as a citrus fruit. Lemons are grown in the mild climatic regions. The lemon is 30 to 45 percent juice depending on the type and climate. The acid that the lemon has is mostly from the citric acid. The lemon is also used as a preservative, because of the acid $C_6H_8O_7$. It is strong like salt and it takes the moisture out of the food to prevent spoilage and rotting. The lemon contains a lot of vitamin C.

Honey - Honey can also be considered. It is highly stable against microbial growth because of its low moisture content and water activity, low pH and anti-microbial constituents.

Bee Propolis - is a mixture of various amounts of beeswax and resins collected by the honeybee from plants, particularly from flowers and leaf buds. It is used to line and seal the comb. The propolis is effective in protecting the hive because it offers antibacterial and antifungal properties.

A multitude of traditional uses are known for this versatile substance. The Greeks and Romans already knew that propolis would heal skin abscesses and through the

centuries it's use in medicine has received varying attention. The ancient Egyptians knew about the benefits of propolis and in Africa it is still used today, as a medicine, an adhesive for tuning drums, sealing cracked water containers or canoes and dozens of other uses

Rosemary Extract - is a powerful antioxidant. It also helps to minimize the oxidation and of some vitamins and amino acids.

Aging processes, such as browning, thickening and wrinkling; and melanoma and other skin cancers are thought to be accelerated by the accumulation of peroxides in the skin tissues. Skin damaging peroxides are produced by environmental factors such as heat and ultra-violet radiation from sunlight, which is considered to be a primary cause of sunburn and melanoma. In a study conducted to test photoprotectivity, it was discovered that Carnosic acid did protect the skin from UV damage. [3] Carnosic acid is found in Rosemary. This evidence is further corroborated in expired US patents 5,358,752, which show in the examples, complete elimination of peroxides as a result of UVB radiation. Rosemary also has a history of anti-bacterial and anti-microbial applications. One study found it to be effective against HIV-1[4]

Grapefruit Seed Extract - is a Natural Antibiotic, Antiseptic, Disinfectant and Preservative. It is used to promote the healing of almost any atypical skin condition. Grapefruit Seed Extract, according to published sources, is effective against more than 800 bacterial and viral organisms, 100 strains of fungus, and a large number of single-cell and multi-celled parasites. This is a preservative that is used by many handcrafters in products that contain water.

Using the information submitted here, it is possible to recognize and choose a 100% natural product that is safe and effective for use. I believe in using fresh, active ingredients in skincare and body care.