

Stabilization Processing Methods

Forever living Products processes its Aloe Vera leaves within hours of harvesting. Aloe Vera gel, in spite of its miraculous effects, has a major disadvantage: it is very sensitive to oxidation (it oxidizes very quickly). If it is not processed immediately, **within 2 hours it loses its therapeutic properties** and it is destroyed by oxygen and microorganisms. So, this gift of nature could be used only by those who had access to the fresh plants.

The leaves are cut manually are washed and rinsed twice before being carefully filleted. **Minutes after filleting, the raw gel is stabilized** by a proven, patented process which preserves essentially all of the 200 different nutritional compounds naturally occurring in the plant. From the time of harvesting, through the entire stabilization process, **the gel is handled in a sanitary professional manner**. The machinery and buildings are clean and sanitary, thus assuring the quality of the product

Only the pure Aloe Vera gel is used. The leaf is removed and is used for fertilizing the soil. The gel is extracted mechanically and in the same time the yellow milky liquid - which is found immediately under the rind, the **aloin** - is separated.

Aloin is a member of substances called anthraquinones, which are found in the sap of Aloe Vera. It is one of twelve anthraquinones but it is the most well-known one. These substances on their own **are powerful laxatives**. Previously they were sold as a compound called bitter aloes and because of their strong smell and bitter taste they were used to paint on children's nails to stop them biting them.

Despite what is often written about them there is no real evidence to support the fact that they **may be harmful in pregnancy** (causing abortion) or that they are **carcinogenic** when ingested over a long period of time

In our drinking gels there is only an extremely tiny amount (less than 50ppm) and **it is not at all harmful** and in fact some authorities believe that at this level aloin is beneficial.

The quality is **rigorously controlled during each stage of processing** immediately after being extracted, the **pulp of the raw gel is instantly stabilized** in order to preserve intact all the natural nutritive components existent in the plant. This pulp is very beneficial factor in the effectiveness of the products.

Even though FLP products are sold as food and cosmetics, they are **manufactured under a pharmaceutical license**. This means that the facilities, machinery, test equipment, etc. are subject to stringent government regulations. Each batch of every

product manufactured is tested a number of times before, during and after final formulation before release by quality control from quarantine. The consumable products are sealed to protect against contamination, and to increase shelf-life.

The bottles containing our Gel, Berry Nectar, Freedom and Bit's and Pitches are **made with a unique three-layer plastic** which further protect the product from oxidation and keeps it fresh. Virtually all materials used in food packaging are approved by the FDA for direct food contact. In the case of materials used for our Aloe Vera drink bottles, there are **no harmful components or compounds that can leach into the actual product.**

We use this multi-layer bottle because our Aloe Vera needs **an oxygen barrier layer** in order to provide maximum product integrity and shelf life. Additionally, the added antioxidant (oxygen) layer **does NOT contain BPA**, but rather a type of vinyl material.

Since Forever Living Products stabilizes and formulates its own, the **products are made on a timely basis.** We don't order a big bath once or twice a year, and let it sit around getting old. You can be assured of getting fresh product, **made only a matter of weeks before arriving at our warehouses.**

A unique technology of Stabilization Aloe Vera Gel

allows preserving all natural property of it and has patent.

In order to preserve the nutritional potency of raw Aloe Vera gel, it must be **stabilized**, and this process inevitably involved the addition of small quantities of other ingredients.

In response to many question s received about these, here is some further information:

Ascorbic Acid (otherwise known as vitamin C).This is a water-soluble vitamin naturally found in many plant materials, especially citrus fruit. Ascorbic acid is also known as Vitamin C. It is essential for the formation of intercellular collagen as well as the maintenance of tooth structures, matrix of bones and capillary walls. It is also necessary for wound healing, facilitates the absorption of iron and is widely used to help prevent colds. Sorbitol is the raw material for the production of Ascorbic Acid

Citric Acid produced from sugar solutions and citrus fruits such as lemons, limes and oranges. It is widely used in the food industry and can be used as a PH adjuster and antioxidant. It can also retard metallic reactions. It is also involved in the Krebs energy cycle which occurs in all cells of the body. It has been used to dissolve urinary bladder calculi and it acts as a mild astringent.

Potassium Sorbate. The potassium salt of Sorbic Acid (found naturally in fresh berries of Mountain Ash) is a natural buffering and flavoring agent which helps protect the freshness of the Aloe.

Sodium Benzoate. Naturally occurring flavoring derived from fruits such as blackberries and other mountain berries. It helps stabilize and prevent bacterial growth during product usage. In the gel, it is used in quantities of less than 0.1% to prevent spoilage after the bottle has been opened.

Sorbitol. Sorbitol is added to the gels as part of the stabilization process. We have 1/10 of 1% of Sorbitol in our Gels to give this product a 5 year shelf life. This is excellent conditioning agent who aids in the absorption of vitamins and minerals. It is naturally occurring in several fruits and has slight sweetening properties, which can help improve taste. Sorbitol is often used as a sweetener in diabetic products. There are two forms of sorbitol used: sorbitol crystals which are in solid form and contain no water and aqueous sorbitol which in a liquid form and is derived from specially processed maize. It is acceptable to people with celiac disease (gluten sensitive).

Tocopherol (Vitamin E). An essential vitamin for man, it is well known for its health related properties. It is a natural antioxidant, derived from wheat germ oil, rice kernel and other vegetable oils.

Xanthan Gum derived from plants such as kelp, it is natural stabilizing and emulsifying agent.

✓ Question from Customers:

Customers are concerned that citric acid or ascorbic acid (Vitamin C) and Sodium Benzoate together will cause problems when they drink the juice - is this correct?

Answer: Sodium Benzoate is a naturally occurring flavouring, derived from fruits such as blackberries and other mountain berries. It helps stabilize and prevent bacterial growth during product usage. In the gel, it is used in quantities of less than 0.1% to prevent spoilage after the bottle has been opened. The question regarding Sodium Benzoate and Vitamin C (ascorbic acid) producing Benzene has been asked quite frequently so the company recently had our drink products tested for Benzene and the results were:

We are pleased to report that no Benzene was detected in our drinks products, when tested to the standard for safe drinking water.

From this information, it is clear that these substances would not be harmful used in the quantities needed for the purposes described above.

Proven Result

The Food and Drug Testing Laboratories of New York conducted an independent test comparing Forever Living Products **stabilized gel** with **the gel from a raw, mature Aloe Barbadensis** leaf. The two were found by them to be “**essentially identical**”. In other words, what you get in the bottles is the same as what you would have if you filleted your own leaf (without the mess!).



Nutrient	Row gel (ppm)	Stabilized Gel (ppm)
Calcium	458 ppm	484 ppm
Phosphorus	20.1	30.4
Copper	0.11	0.32
Iron	1.18	1.84
Magnesium	60.8	92.0
Manganes	1.04	3.49
Potassium	797	594
Sodium	84.4	176

Amino Acid	Row gel (ppm)	Stabilized Gel (ppm)
Aspartic acid	43.0	27.0
Glutamic acid	52.0	35.0
Allanine	28.0	22.0
Isoleucine	14.0	14.0
Phenylalanine	14.0	14.0
Threonine	31.0	30.0
Proline	14.0	17.0
Valine	14.0	14.0
Leucine	20.0	34.0
Histidine	18.0	14.0

Serine	45.0	20.0
Glycine	28.0	14.0
Methionine	14.0	14.0
Lysine	37.0	41.0
Arginine	14.0	14.0
Tyrosine	14.0	14.0
Tryptophan	30.0	30.0
Amino Acid	302.0	240.0
Proteins	1%	1%

Stabilized Aloe Vera Gel is principle ingredient in our aloe base products.