

**organic**aloe<sup>(PTY)LTD</sup>

ALOE FEROX

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# Leaf Gel Products



Reg.Nr. 64/05814/07 VAT Reg. Nr. 4690123213



# ALOE FEROX | CLASSIFICATION & UTILIZATION

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**SCIENTIFIC NAME:** ALOE FEROX MILL

**COMMON NAMES: ENGLISH;** BITTER ALOE, CAPE ALOE, RED ALOE

**AFRIKAANS;** BITTERAALWYN, BERGAALWYN.

**ISIZULU;** INLABA

**ISIXHOSA;** IKHALA

Aloe Ferox is a succulent plant belonging to the Aloaceae family and grows in abundance in South Africa. With approximately 360 species in the family, Aloe Ferox has distinctive spiny leaves and most notably, twice as many amino acids, a powerful Aloin agent and an abundance of polysaccharides when compared to Aloe Vera.

**For centuries, Aloe Ferox has been a popular ingredient for -**

- Skincare products
- Tonic drinks
- Laxative
- Wound healing and ointments
- Immune system booster
- Anti-parasitic formulas
- Antiulcer
- Antidiabetic treatment
- Antiseptic agent

Since 1986, Organic Aloe has been sustainably harvesting Aloe Ferox and processing it into a wide range of raw, added-value materials, suitable for providing an active Aloe Ferox ingredients to your products.

Organic Aloe is a **GMP Certified Company** and members of the Aloe Council of South Africa, to which all of our products are certified.

In addition, we are registered with the **Food and Drug Administration (FDA)** and are committed to using wild-harvested raw material and value-added products.

## IMPACT

Aloe Ferox is the most commercially utilised indigenous plant in South Africa. Aside from the benefits of the plant itself, the Aloe harvesting alone has a significant and positive impact on the socio-economics of South Africa.

In addition to supporting local businesses with raw Aloe Ferox materials, the harvesting and processing of the plant also provide jobs, especially in and around rural communities where the plant grows.



# ALOE FEROX

VS

# ALOE VERA

Despite both being part of the Aloaceae family and having healing properties, there is a significant difference between the two plants.

## PLANT STRUCTURE

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• Bitter Aloin is found just under the skin and is easily separated from the inner leaf by hand.</li></ul> | <ul style="list-style-type: none"><li>• Bitter Aloin is found throughout the leaf and a chemical process is used to extract it.</li></ul> |
| <ul style="list-style-type: none"><li>• Spines on the leaves</li></ul>   | <ul style="list-style-type: none"><li>• No spines</li></ul>   |
| <ul style="list-style-type: none"><li>• Firmer inner gel, making it easier to extract</li></ul>  | <ul style="list-style-type: none"><li>• Softer inner gel</li></ul>  |

## MOLECULAR STRUCTURE

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• 28% higher in Aloin</li></ul>   | <ul style="list-style-type: none"><li>• Lower Aloin content</li></ul>       |
| <ul style="list-style-type: none"><li>• 36% higher in Amino Acids</li></ul>   | <ul style="list-style-type: none"><li>• Lower Amino Acids content</li></ul> |
| <ul style="list-style-type: none"><li>• 20 times more Bitter Sap, which is where the healing properties, anti-oxidant and viral stimulate</li></ul> | <ul style="list-style-type: none"><li>• Less Bitter Sap</li></ul>           |

## GROWING ENVIRONMENT

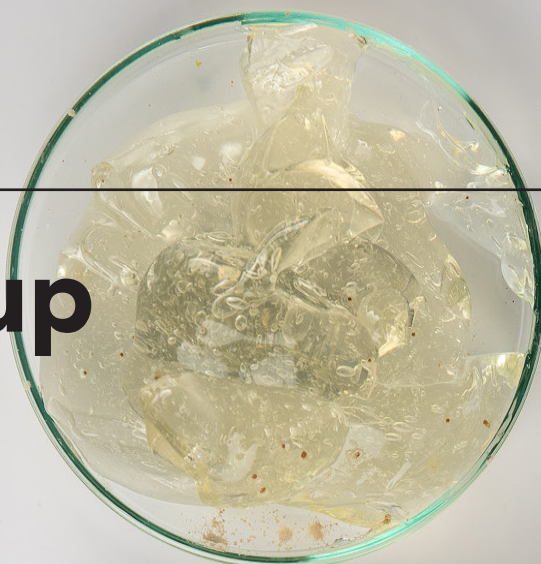
- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Grows wild in South Africa, particularly the Western and Eastern Cape region.</li></ul> | <ul style="list-style-type: none"><li>• Heavily cultivated and farmed worldwide</li></ul> |
| <ul style="list-style-type: none"><li>• No pesticides or chemicals used in the growing process</li></ul>                        | <ul style="list-style-type: none"><li>• N/A</li></ul>                                     |

ALOE FEROX

# Leaf Gel Group

Organic Aloe leaf gel products all stem from wild and succulent Aloe ferox leaves, which are sustainably harvested in the Southern Cape by hand. These leaves are then processed and converted at the Organic Aloe factory, to produce high-quality leaf gel raw materials, ready to be added to your product.

**Our factory is both Food Health and Safety and a GMP Certified Facility.** Thanks to the Aloe Emodin compound, Aloe Ferox is widely used for its laxative and cleansing effects, amongst other health-promoting properties.



# LEAF FIBRE | PRODUCT GROUPING

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The Aloe ferox has a dilatatory effect on the capillaries and veins, which means that it can increase nutrient transportation within your body. This benefits growth, nutrition, rejuvenation and regeneration.

As Aloe ferox is 99% water, it's an excellent source of properties that encourage skin hydration, an essential selling point for cosmetic products.

**Once the leaves are harvested, we have a few processes each of which achieve different results -**

## GEL POWDER

In this whole leaf extraction process, the fresh aloe leaves are pulped and pressed to extract a mixture of gel juice and bitter sap, which is then finely-filtered. A self-sterilising organic solvent is used to remove the bitter sap and produce gel juice solids. These solids are then spray-dried to produce an aloe-gel-only fine powder.

We recommend blending Aloe gel powder with Maltodextrin, which improves the solubility of our product.

Once complete, Aloe gel powder at 200:1 has several applications:

- **Skin Penetrant** - Healing, soothing and regenerating properties both internally and externally
- **Liquid Suspension** - lotions, regenerating facial tonics, shampoos, sunburn relief creams, balms, health beverages and tonics.

## GEL LIQUID

Organic Aloe has a patented process to derive this gel liquid. Water, heat and a natural compound are added to the fresh aloe leaf pulp to remove the bitter sap and release the gel nutrients from the leaf fibres.

Through this process, we're able to produce organic gel liquid, which is available in two applications:

- **Aloe Liquid Gelly/Pectin** - this water-soluble raw material can be added during the water phase of your product to add a high concentration of Aloe nutrient as a beneficial ingredient.
- **Aloe Drink** - ideal for the health beverage industry, it can be retailed as is, flavoured or combined with Aloe Bitter Powder product to produce a digestive tonic.

# LEAF GEL | PRODUCT RANGE

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*\* No additives or parabens added. No animal testing or animal-derived products used. We are committed to using wild-harvested raw material and value-added products.*



## ALOE FEROX GEL POWDER\*

INDUSTRY USED: Pharmaceutical  
Cosmetic/skincare  
Beverage

APPLICATION: Cosmetic formulations  
Skincare formulations  
Beverage formulations

\*The best way of adding aloe ferox powder 200:1 to any formulation is to pre-disperse it in a glycol such as glycerine, propylene glycol, sorbitol and the like. When the pre-dispersed powder is added to water, even under low shear, the powder disperses very well, without any clumping whatsoever. Whilst aloe ferox powder 200:1 is relatively heat stable, we always add it at the end of a manufacturing process at a temperature of 50°C, or less, just to ensure the retention of the raw material's beneficial properties



## ALOE FEROX LIQUID/GELLY PECTIN

INDUSTRY USED: Beverage

APPLICATION: Aloe drink formulation  
Skincare formulation



## LEAF GEL | PRODUCT RANGE

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### FORMULATED GEL

INDUSTRY USED: Cosmetic/skincare  
Personal use

APPLICATION: Formulated product produced in 5 lt tubs and ready for customers own branded packaging or used as a base product for the customer to add to their own formula.



### ALOE DRINKS (WHITE HDPE PACKAGING)

INDUSTRY USED: Beverage

APPLICATION: Customer's own branding



# REFERENCES

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CAB Abstracts

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