# **PRODUCT INFORMATION**

# HYDREPAIR<sup>®</sup> LEAF BIO COMPLEX



## **Natural Moisture and Regeneration**

As the largest human organ, the skin fulfils a wide variety of different functions: sensory function, mechanical protection, barrier function, protection against UV light and temperature regulation. In order for the skin to perform these important tasks, an external and internal supply of nutrients, trace elements and skin-conditioning substances arenecessary. Frequent washing and disinfecting puts a strain on the skin's protective function. Botanica has developed a purely natural HYDRepair<sup>®</sup> Leaf Bio Complex which optimally supports moisturizing and regenerating cosmetic formulations.

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### Composition

#### Organic Agave Syrup: wound healing

Agave syrup is an ancient Aztec remedy for wound healing [1]. Agaves contain polysaccharides, flavonoids and saponins [1,2]. The wound healing properties of agaves are attributed to these substances [1,2].

#### Organic Broadleaf Plantain Extract: wound healing

Several biological activities are documented for the broadleaf plantain, including antiinflammatory, antibacterial, antioxidant and wound healing effects [3]. The *in* vivo-observed wound healing activity of broadleaf plantain can be assigned to a synergy of various constituents, including polysaccharides, lipids, caffeic acid derivates, flavonoids, iridoid glycosides and terpenoids [3,4].

#### Organic Sempervivum Juice: wound healing, cell regenerating

Houseleek (*Sempervivum tectorum*) contains polyphenols, tannins, proanthocyanidins and a high variety of flavonoids, which have been shown to have antioxidant, anti-inflammatory and antimicrobial effects [5,6,7]. An *in vitro* scratch assay performed on human keratinocytes confirms the wound healing and cell regenerating activity of the organic Sempervivum juice similar to organic Aloe Vera juice, which was used for comparison [8].

#### **Organic Glycerin: moisturizing**

Glycerin is a natural component of animal and vegetable fats and oils. It is used for various functions in cosmetics, mainly as a moisturizer [9].

### **Additional Information**

| Botanica Product Number:      | P-00025832, see specification                            |
|-------------------------------|--|
| Organic and Natural Cosmetic: | compliant, see specification                             |
| Vegan:                        | compliant, see specification                             |
| Origin:                       | 100% natural, 100% organic, free from coconut & palm oil |
| Extraction Process:           | Maceration, without addition of water                    |

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