Product Name: Phyto-Biotics Perilla®

Code: 40600

INCI Name: Perilla Frutescens Extract

Phyto-Biotics Perilla is manufactured by mechanically grinding/milling *Perilla frutescens*, then inoculating the plant cells with *Leuconostoc*. The mixture is then filtered and extracted in water.

*Leuconostoc* is a genus of microorganisms used to produce a variety of food products. Most commonly, it is one of the types of microorganisms used to convert cabbage into sauerkraut. *Leuconostoc* is a type of Lactic Acid Bacteria (LAB) and converts various sugars into lactic acid. Any existing LAB in Phyto-Biotics Acai® is removed by filtration. Since *Leuconostoc* species are intentionally used in food, they may be classified as Generally Recognized as Safe (GRAS) according to the FDA’s Federal Food, Drug and Cosmetic Act.¹

The act states:

> Any substance that is intentionally added to food is a food additive, that is subject to premarket review and approval by FDA, unless the substance is generally recognized, among qualified experts, as having been adequately shown to be safe under the conditions of its intended use, or unless the use of the substance is otherwise excluded from the definition of a food additive.¹

*Perilla frutescens* is commonly used in Japanese and Korean cuisines. In Japanese culture, it is referred to as “shiso” and is used as an herb or seed/spice. *Perilla frutescens* is used in Korean food as both the leaf itself and the oil of the seeds.² Because of this common culinary usage, *Perilla frutescens* may also be classified as GRAS by the FDA.¹

Phyto-Biotics Perilla® was analyzed for its effect on cell viability. It was proven to increase both cell viability and metabolism.

Phyto-Biotics Perilla® was tested using *in vitro* dermal and ocular irritation models. This product was found to be non-irritating in both models. The full report is attached for reference.

The above information supports the safety of Phyto-Biotics Perilla® in cosmetic applications at use levels of 1.0 – 10.0%. No further testing is required at this time.

---