

Technical datasheet: Benegut

1. Product Description

Benegut is a fine beige powder extract obtained from the leaves of *Perilla frutescens* (L.) Britton. *Perilla frutescens* is a member of the family Lamiaceae, an annual herbaceous plant native to Asia. Country of Origin: Japan

2. Manufacturer/Supplier

Amino Up Co., Ltd.
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Sapporo 004-0839, Japan
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D- 40764 Langenfeld
TEL (+49) 2173/1098202
FAX (+49) 2179/1098210
<http://www.vitalsolutions.biz>

3. Composition

Native Perilla Leaf Extract: 4-10 %
Maltodextrin (Tapioca-derived): 90-96 %

4. Manufacturing Procedure

Benegut is obtained from the leaves of the dried *Perilla frutescens* plant by water extraction. The raw material: extract ratio of the native extract is 5:1. The extract is spray dried together with Maltodextrin. No preservatives are added.

5. Specification

Appearance:	Fine beige- brown powder with a characteristic odor
Solubility:	Freely soluble in 100 g/L in water
Loss on drying:	< 5.0 %
Particle size:	> 80 % < 180 µm
Bulk density:	0.2-0.6 g/ml
Tapped density:	0.4-0.8 g/ml
pH:	4.6-5.6 10 % water solution
Foreign matter:	not detected
Total Polyphenols:	≥ 0.57 %
Rosmarinic acid:	≥ 0.05 %
Special Flavonoids Fraction:	≥ 0.18 %
Vicenin-2:	≥ 0.007 %
Heavy metals (EC) No 1881/2006	
Arsenic:	≤ 1 mg/kg (ppm)
Cadmium:	≤ 0.05 mg/kg (ppm)
Lead:	≤ 0.1 mg/kg (ppm)
Mercury:	≤ 0.1 mg/kg (ppm)
Pesticides (EC) No 396/2005:	According to legislation
Methyleugenol (Phenylpropene):	not detected (Limit: 0.1 ppm)
Myristicin (Phenylpropene):	not detected (Limit: 0.1 ppm)
Perillaketone (Terpenoid):	not detected (Limit: 0.1 ppm)

Microbiology: Ph. Eur. latest edition 5.1.4

Total aerobic microbial count:	≤ 1000 cfu/g
Total yeasts and moulds count:	≤ 100 cfu/g
Bile-tolerant gram-negative bacteria:	≤ 100 cfu/g
Salmonellae:	absent in 10 g
Escherichia coli:	absent in 1 g
Staphylococcus aureus:	absent in 1 g

6. Nutritional Analysis

Energy:	370-400 kcal/100 g
Protein:	0-2.5 g/100 g
Fat:	0-1.5 g/100 g
Trans fat:	not detected (Limit: 0.05 g/100 g)
Cholesterol:	not detected (Limit: 1 mg/100 g)
Carbohydrates:	90.0-95.5 g/100 g
Sugar:	0.8-1.8 g/100 g
Dietary fibre:	0-2 g/100 g
Sodium:	0-100 mg/100 g
Ash:	< 2.0 g/100 g

7. Contaminants

The following contaminants are randomly inspected, referring to the annual quality control plan:
Aflatoxins, Dioxins/PCBs, Heavy metals, Polyaromatic hydrocarbons (PAH).

8. Intended Use and Declaration

The intended use is for food supplements. It is recommended to label the product as “Perilla Leaf Extract”.
The intended use is as flavour ingredient in foods. It is recommended to label the product as “natural flavouring Perilla leaf preparation”.

9. Storage and Shelf-life

The shelf-life of Benegut in sealed original containers and under dry conditions at ambient temperature is predicted to be at least 3 years.
We recommend storing Benegut under dark, cool and dry conditions in sealed original containers.

10. Packaging

5 kg and 10 kg (net weight) Benegut is packed into a food-grade polyethylene bag, which is packed into an aluminium bag.

11. Regulatory

Benegut can be used in food supplements in Europe, based on the *Perilla frutescens* entry in the EU Novel Food Catalogue, and on Directive 2002/46 on food supplements.
Benegut can be used in dietary supplements in the U.S., based on the *Perilla frutescens* entry in the USDA plant inventory database for approved foods. It is not falling under the requirements of a New Dietary Ingredient Notification.
Benegut can be used as natural flavouring preparation in foods referring to the EC 1334/2008 regulation.

12. Certificates

Allergen free certificate
Non-GMO certificate
TSE/BSE certificate
Melamine free certificate
Kosher certificate
Halal certificate
Non-irradiation certificate
Organic compliance certificate