TECHNICAL DATA SHEET

MATCHA GREEN TEA EXTRACT / HC / HGL / PF /

Trade Name: MATCHA GREEN TEA EXTRACT / HC / HGL / PF /
Product Code: ETVMHCHGLPF
INCI Name: CAMELLIA SINENSIS LEAF EXTRACT, GLYCERIN, AQUA.
INCI Status: Conforms.
REACH Status: Low Volume Exemption.
CAS Number: 84650-60-2; 56-81-5; 7732-18-5.
EC Number: 283-519-7; 200-289-5; 231-791-2.
Origin: CAMELLIA SINENSIS LEAF EXTRACT: Vegetable origin.
GLYCERIN: Vegetable origin.
Processing: GMO Free. / No Ethoxylation. / No Irradiation. / No Sulphonation. / No BSE/TSE. / No CMR. / No SVHC. / No Nanomaterial. / No DEG. / No DEHP. / No Formaldehyde. / No Phthalates. /.
Additives: Preservatives: None. Preservative Free. / Antioxidants: None. / Other additives: None.
Solvents Used: Water and glycerin.
Appearance: Dense slightly opalescent liquid.
Colour: Characteristic (yellowish to deep brown).
Odour: Characteristic.
Specific gravity: 1,100 - 1,400 g/cm³ (20°C approx.).
pH value: 4.0 – 6.5 (sol. 10%, 20°C approx.).
Total polyphenols: 70 – 100 mg GAE/g extract.
Flavonoids: 6 – 10 mg RE/g extract.
Drug/extract ratio: 4.5: 1.
Ecological Information: Sustainable.
Microbial Count: Total aerobics: Max. 300 microorganisms / gram.
Fungi and yeasts: Max. 200 microorganisms / gram.
Pathogens: Total absence in 1 gram.
Suggested Use Levels: 0.5 – 2%.
Suggested Applications: Treatment of acne, dandruff and psoriasis. Suitable for sport products before and after efforts.
Properties: Anti-aging, anti-radical, protective, stimulating of skin metabolism, anti-cellulite and slimming.
Industrial packing: 1Kg., 5Kg., 25Kg., 225Kg.
Storage conditions: It is very important to keep the product in well closed containers, away from direct sunlight at temperatures not over 15°C. In case of not having refrigerators, store the product in the coolest and free from artificial light area.
- Dumont's grosse Kräuter Enzyklopädie.
- Fitocosmeticos ALVAREZ CRUZ i BAGUE SERRANO.
- Gran enciclopedia de las plantas medicinales, BERDONCES i SERRA.
- Plantas medicinales, FONT i QUER.
- Proserpio G., Martelli A., Patri GF.; Elementi di Fitocosmici; Ed. Sepem / Milano 1983.
- Websites.
OVERVIEW

Matcha green tea has its origin in China and the preparation begins several weeks before its harvest. First the tea plants are covered to hide them from the sun. In this way its growth is delayed and a darker green color appears on the leaves. With this process the tea has greater content in amino acids, thus resulting in a sweeter tea.

After harvest, the leaves are placed on a flat surface for drying. The result is called “tencha”. The stem and veins are removed from the leaves before grinding them to a fine powder texture; of an intense green, known as “matcha”. Only the ground “tencha” produces matcha.

The taste of matcha depends on its amino acids. The best qualities have a sweeter and more intense flavor. The most common varieties are obtained from the last harvests of the season.

To obtain MATCHA GREEN TEA EXTRACT, BIOGRÜNDL, S.L. starts with the tea leaves just indicated, treating them with a mixture of water and glycerin.

MATCHA GREEN TEA EXTRACT by BIOGRÜNDL, S.L. contains the following active ingredients:

- Amino acids and proteins.
- Puric bases similar to caffeine of coffee and theobromine of cocoa.
- Tannins
- Polyphenols (caffeic and chlorogenic acids).
- Bioflavonoids.
- Antioxidants and anti-radicals.
- Vitamins (B, C, PP and carotenes).
- Trace elements (F and Zn).
TECHNICAL DATA SHEET

USE AND DOSAGE

The incorporation of matcha green tea extract in Cosmetics is justified by the following properties: anti-aging, anti-radical, protective and stimulant of cutaneous metabolism. Also, as anti-cellulite and slimming.

MATCHA GREEN TEA EXTRACT by BIOGRÜNDL, S.L. is very useful, also, in the treatment of undesirable processes of the skin, such as acne, dandruff and psoriasis. Because of its energizing power, it is indicated for sport products before and after efforts.

The recommended concentrations of use are between 0.5% and 2%.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dense slightly opalescent liquid.
Colour: Characteristic (yellowish to deep brown).
Odour: Characteristic.
pH value: 4.0 – 6.5 (sol. 10%, 20ºC approx.).
Specific gravity: 1,100 – 1,400 g/cm³ (20ºC approx.).
Total polyphenols: 70 - 100 mg GAE/g extract.
Flavonoids: 6 – 10 mg RE/g extract.
Drug/extract ratio: 4.5: 1.
Viscosity (Visco star-L, needle 1, speed 200 rpm, 20ºC approx.): 50 – 100 cPs.
Solubility in water: Fully soluble (20ºC approx.).
Solubility in other solvents: Insoluble in organic solvents and lipids. Soluble in surfactants, hydroalcoholic, hydroglyceric and hydroglycolic mixtures.
Heavy metals: No more than 5 mg/Kg.
Sulfated ash: No more than 0,01%.
Chlorides: No more than 0,007%.
Sulfates: No more than 0,002%.
Other information: None.
Total aerobics: Max. 300 microorganisms / gram.
Fungi and yeasts: Max. 200 microorganisms / gram.
Pathogens: Total absence in 1 gram.
DERMATOLOGY INNOCUOUSNESS

It was performed by the patch test (Patch test) on 10 volunteers. To this purpose, 2% MATCHA GREEN TEA EXTRACT by BIOGRÜNDL, S.L., was added to an O/W emulsion; 0.5g. of this emulsion was poured over the patch and attached on the forearm. It is thus maintained for 24, 48 and 72 hours, after which, the given reaction was evaluated, according to the following table of values:

1. No erythema.
2. Slight erythema.
3. Well defined erythema.
4. Severe erythema.

The result was absence of erythema on the 10 volunteers.

On the recommended concentrations, the product is skin innocuous.

STORAGE CONDITIONS

It is very important to keep the product in well closed containers, away from direct sunlight at temperatures not over 15ºC. In case of not having refrigerators, store the product in the coolest and free from artificial light area.

INCI DENOMINATION

CAMELLIA SINENSIS LEAF EXTRACT, GLYCERIN, AQUA.