Product Information Sheet

BURGIMMUNE FORTE PREMIUM PREMIUM IMMUNE-BOOSTING TABLET

[FIGURE: Front view of the Burgimmune Forte Premium product packaging. A reusable burgundy-purple pouch with the product name in white and green lettering: 'Burgimmune FORTE - Premium Immune-Boosting Tablet'. The packaging features a photograph of two dogs (Boxer and large-breed mixed breed). Key active ingredients are highlighted with circular labels: Ginseng (gold), Spirulina algae (green), Vitamin B6 (green), Beta-glucan (green), Vitamin E (green), Coriolus versicolor mushroom (green). On the right, a veterinary indication for medium and large-breed dogs. At the bottom: N.P.C.S. Natural Pet Care System logo, 30 tablets / sufficient for 30 days (for a healthy 30 kg dog).]

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BURGIMMUNE FORTE PREMIUM - PREMIUM IMMUNE-BOOSTING TABLET

Product Information Sheet

Veterinary medicinal product for medium and large-breed dogs (30 kg+), as well as for smaller dogs (under 30 kg) suffering from acute or chronic conditions.

Product name	BURGIMMUNE FORTE PREMIUM IMMUNE-BOOSTING TABLET
Product form	Tablet for oral administration (30 tablets)

Composition (approx. 993 mg active substance / tablet)

Active substance / Excipient	Amount
Coriolus versicolor mushroom	660 mg
Beta-glucan (75%)	133 mg
Ginseng	100 mg
Vitamin B6	50 mg
Spirulina algae	40 mg
Vitamin E	10 mg
Microcrystalline cellulose (excipient)	300 mg
Magnesium stearate (excipient)	15 mg

Nutritional values (on dry matter basis)

Crude protein	4.9 w/w%
Crude fibre	11.6 w/w%
Crude fat	2.7 w/w%
Crude ash	1.05 w/w%
Moisture	1.97 w/w%
Dry matter content	98.03 w/w%

General description of the product

Burgimmune is a combination of plant-based active substances, medicinal mushroom and beta-glucan, as well as vitamins, important for the efficient functioning of the immune system. Its ingredients support the non-specific, humoral and cellular immune response, enhance the efficacy of antitumour therapies and simultaneously reduce their unpleasant side effects.

Action profiles by ingredient:

- **Immune-boosting:** Coriolus versicolor, beta-glucan, ginseng, vitamin B6, Spirulina algae
- **Antioxidant:** Coriolus versicolor, ginseng, vitamin E
- **Haematopoiesis-stimulating:** Vitamin B6, Spirulina algae
- **Appetite-stimulating, anti-emetic:** Vitamin B6
- **Skin-supporting:** Vitamin B6, vitamin E

Detailed description of active substances

Coriolus versicolor mushroom (Turkey Tail)

Coriolus versicolor (also known as Trametes versicolor, Polyporus versicolor, or 'yunzhi' mushroom) is a common species of mushroom found throughout the world. The name versicolor refers to its multicoloured appearance; the mushroom is also called 'turkey tail' because its fan-shaped, multicoloured fruiting body resembles the tail of a wild turkey.

The Turkey Tail mushroom stimulates and supports the formation and activity of natural killer (NK) cells, which participate in destroying cancer cells and combating infections. In some countries, the mushroom is cultivated on an industrial scale for the production of two natural polysaccharides - beta-glucan (PSK) and polysaccharide-peptide (PSP). Medicines prepared from these are used as adjuvant therapy in oncological patients: they reduce the side effects of surgery, radiotherapy and chemotherapy. PSK is a widely used anticancer drug in Japan.

In a study conducted at the School of Veterinary Medicine of the University of Pennsylvania*, dogs with haemangiosarcoma were treated with Coriolus versicolor extract. The average survival time increased to 199 days (the longest previously known survival time was 86 days).

The most important active substances of Coriolus versicolor mushroom:

- PSK (beta-glucan-protein complex, krestin): antioxidant, antitumour, antiviral and immunomodulatory effect; its direct antitumour effect has been demonstrated experimentally.
- PSP (polysaccharide-peptide): antiviral and antioxidant compound.
- Ergosterins (D29-provitamin derivatives): antitumour polysaccharide components; they inhibit the formation of the vascular network (angiogenesis), thereby preventing tumour growth and the formation of metastases.

** Evidence-Based Complementary and Alternative Medicine: Single Agent Polysaccharopeptide Delays Metastases and Improves Survival in Naturally Occurring Hemangiosarcoma - Dorothy Cimino Brown, 2012.*

Beta-glucans

Beta-glucans are complex carbohydrate molecules with a unique molecular structure that determines their biological activity. Molecules with branching at the 1->3 and 1->6 carbon atoms are among the best-known immunostimulants; they are obtained from the cell wall of yeast cells by a special process to achieve the strongest possible immunological activity.

Numerous clinical studies have demonstrated that beta-glucans extracted from yeast have the most potent immunological effects. They effectively help the immune system fight bacteria and viruses, and enhance the efficacy of vaccines.* Research has shown that the number of antibodies against canine parvovirus and the rabies virus increased significantly in dogs that received beta-glucan at the time of vaccination (Haladova et al., 2011).

When administered orally, they increase the level of IgG and IgA antibodies in the blood and mucous membranes. Their mechanism of action is based on specific receptors on the surface of macrophages, neutrophils, monocytes, dendritic cells and NK lymphocytes, by binding to which they:

- activate the complement system;
- stimulate the production of pro- and anti-inflammatory interleukins (IL-1, IL-6, IL-10, IL-12) and TNF-alpha;
- increase the stability of the immune system; protect the organism against bacterial, viral, fungal and parasitic infections.

The primary role of beta-glucan is the activation of macrophages - the immune cells of the first line of defence of the immune system. Macrophages capture and digest foreign substances (bacteria, viruses), mobilise the defence system, recognise and destroy mutant cells. The active fragments released from the digested beta-glucan bind to the complement receptors of neutrophilic granulocytes, activating the mechanism of destroying pathogens and tumour cells.

** Food and Agricultural Immunology: Effects of orally administered beta-1,3/1,6-glucan on vaccination responses and immunological parameters in dogs - Boris Vojtek, 2017.*

Ginseng

Ginseng, known from traditional Chinese medicine, has antioxidant, anti-inflammatory and immunostimulatory effects. Its antitumour effect has been demonstrated for certain types of tumours; it stimulates the functioning of the non-specific immune system. It improves brain function and may help reduce blood sugar levels. The saponins in ginseng (ginsenosides) promote the production and maturation of mononuclear cells, macrophages and dendritic cells - cells responsible for antigen presentation, i.e. recognising foreign substances that have entered the body and presenting them to other immune cells.

Vitamin B6

Vitamin B6 (pyridoxine) is a water-soluble vitamin and the starting material for important coenzymes. It is necessary for the proper functioning of the immune, digestive and nervous systems, as well as for haemoglobin synthesis. It improves metabolism, supports vision, has numerous positive effects on skin health, detoxifies the liver and assists kidney function. Its demonstrated appetite-stimulating and anti-emetic effects are particularly important in cases of oncological diseases.

Spirulina algae

Spirulina is a blue-green microalgae found in both salt and fresh water. It is arguably the most nutrient-dense food on Earth. Its main active substances:

- C-phycocyanin (blue pigment, without magnesium): antioxidant, immunostimulatory, haematopoiesis-stimulating, antiviral and analgesic effects.
- Chlorophyll-A (green pigment, contains magnesium).
- Approx. 50% protein - particularly rich in amino acids, including essential amino acids.
- High molecular weight polysaccharides (e.g. calcium salt of spirulan), sulpholipids, gamma-linolenic acid (~1%), beta-carotene and other carotenoids, vitamins B, C and E.

Main effects of Spirulina algae:

- Antiviral, antimicrobial, antioxidant.
- Anti-inflammatory (especially through C-phycocyanin, whose effect has also been demonstrated in experimentally induced arthritis in animals).
- Haematopoiesis-stimulating: promotes the proliferation and differentiation of cells involved in bone marrow haematopoiesis. Its iron content is relatively well absorbed compared to plant sources.
- Immunomodulatory, tumour-inhibiting and tumour-slowing, detoxifying, attenuating the side effects of drugs.
- Cardioprotective, hepatoprotective and nephroprotective.
- Inhibits platelet aggregation, slows atherosclerosis, has a beneficial effect on blood lipids (reduces LDL-cholesterol, increases HDL-cholesterol), hypoglycaemic.
- Anti-allergic (demonstrated in allergic rhinitis), generally tonic.

Vitamin E

Vitamin E (alpha-tocopherol) is a fat-soluble antioxidant vitamin that protects against the harmful effects of free radicals. Free radicals are formed during the normal metabolic processes of cells; vitamin E inhibits their formation and their cell-damaging effects. Due to its fat-solubility, it also provides effective protection for cell membranes. It protects the coronary arteries of the heart, inhibits blood clot formation (effective in preventing thrombosis) and has beneficial effects on the brain as well, since the cells that protect nerve cells also contain fatty acids susceptible to free radical damage. It reduces skin fragility, promotes wound healing and protects red blood cells. It also actively participates in numerous processes of the immune system.

Target species and indications

Target species: dog

Burgimmune contains a specially formulated combination of plant-based active substances, medicinal mushroom, beta-glucan and vitamins. These ingredients - through their immunostimulatory and antioxidant effects - effectively contribute to maintaining health and fighting disease.

Due to its special composition, Burgimmune is specifically indicated as adjuvant treatment for oncological diseases. It supports the non-specific, humoral and cellular immune response, enhances the efficacy of antitumour therapies and reduces their unpleasant side effects (appetite-stimulating, anti-emetic, haematopoiesis-stimulating, skin-supporting effects).

It is generally recommended for strengthening the immune system:

- in cases of viral or bacterial infections;
- in cases of parasitic infections;
- to support the immune system of young animals;
- in pregnant and lactating females;
- in ageing pets, to maintain a good quality of life for as long as possible.

Dosage and method of administration

To be administered orally (per os).

Case	Dosage
Healthy animal	1 tablet per 30 kg body weight per day
Acute or chronic case	Double dose (2 tablets per 30 kg bw per day)

At the normal dose, for 30 kg body weight, one pouch is sufficient for 30 days.

Recommended duration of administration

- Healthy animal: 2-month course, twice a year.
- Ageing animal (small breed: over 8 years of age; large breed: over 6 years of age): continuous administration recommended.
- Puppy: continuous administration recommended from 6 weeks to 6 months of age. (If earlier immune support is required, consult your veterinarian!)
- During pregnancy and lactation: may be administered continuously.
- In case of illness or infection: 1-3 month course, or continuous use recommended for the duration of the illness. (Consult your veterinarian!)
- In case of surgery or allergy: 1-3 month course, or continuous use recommended until recovery. Before a planned surgical procedure or anticipated allergy season, it is advisable to start the course in advance. (Consult your veterinarian!)

The dosage must be strictly adhered to!

Contraindications and side effects

Contraindications	Not to be used in cases of known hypersensitivity to any of the ingredients.
Side effects	None known. In very rare cases, diarrhoea may occur. In such cases, reducing the dose or suspending administration and consulting a veterinarian is recommended.

WARNINGS

The use of this product does not replace veterinary medical treatment recommended for specific conditions. Before use, and if the animal's condition worsens or does not improve, seek the advice of your veterinarian. In very rare cases, diarrhoea may occur. In such cases, reducing the dose or suspending administration of the product and consulting a veterinarian is recommended.

Storage, packaging and other information

Expiry date	Maintains its quality until the date indicated on the packaging (month/year). Usable within 2 years from the date of manufacture when stored in the original packaging.
Storage conditions	Store at room temperature, below 25 degrees C, in a dry place, protected from light and frost.
Packaging	30 tablets in a resealable, recyclable pouch.
Keep	Keep out of reach of children!
Use	For veterinary use only!
Waste disposal	Unused product and empty packaging must be disposed of in accordance with local regulations.
Registration number	1695/1/NM/2020 NEBIH ATI

Distributor and manufacturer details

Distributor	Natural Pet Care System Magyarorszag Kft.
Distributor address	2120 Dunakeszi, Szent Istvan utca 59/a, Hungary
E-mail	info@burgimmune.com
Manufacturer	Ujdonsagok Kft.
Manufacturer address	6728 Szeged, Budapesti ut 11. (HU 05 1 00 164), Hungary

For further information, consult your veterinarian or pharmacist!