

## High concentration B vitamins - Beta-glucans - Phospholipids With hydrolized animal protein of porcine origin

# Complementary feed for dogs.

#### Composition

Products from the yeast Saccharomyces cerevisiae (25,4%), Monoglycerides of fatty acids C14-C18, Hydrolyzed animal protein of porcine origin (3,5%), Maltodextrin, Stearic acid of vegetable origin.

#### **Additives**

Nutritional additives (mg/kg): Vitamin B1 (41000) - Niacinamide (27300) - Calcium-D-pantothenate (24100) - Vitamin B2 (13650) - Vitamin B6 (9100) - Vitamin E (1340) - Vitamin B12 (84,5). Technological additives (mg/kg): Lecithins (33400).

**Analytical constituents** Crude protein: 16% - Crude fibre: 16,5% - Crude fat: 24% - Crude ash: 9% - Ash insoluble in HCl: 5,4%.

### Instructions for proper use

One tablet per 10 kg bodyweight once a day.

The daily quantity can be doubled, depending on the conditions of the animal and the indications of the veterinary surgeon.

Administer for at least two weeks.

These palatable tablets can be administered on their own or broken into some food that the animal appreciates.

Each tablet can be broken into four parts to facilitate the administration of the right quantity. Place the tablet on a flat surface with the side with the incisions facing up. Press the centre of the tablet with your thumb to break it into four parts.

# **Manufactured and packaged by** Teknofarma S.r.l. Strada Comunale da Bertolla all'Abbadia di Stura, 14 - Turin - Italy

Identification number: a IT 000146 TO - ABP4819PETPP3

www.teknofarma.com

Keep out of reach of children and pets. Store in a cool and dry place.

Batch n. / Best before: see side of the box.

#### One tablet contains

Beta-glucans 1,3/1,6\* mg 100 - Vitamin B1 mg 14.5 - Complex of phospholipids mg 12.5 (including Phosphatidic acid mg 9) - Niacinamide mg 10 - Calcium-D-pantothenate mg 9 - Vitamin B2 mg 5 - Vitamin B6 mg 3 - Vitamin E mg 0.5 - Vitamin B12 μg 30.
\* As **MacroGard**® (Biorigin registered trademark)

## **Indications**

STIMULFOS® Pet Line is indicated in all situations where it can be useful to restore the reactive abilities of the organism: deficiency of B-groups vitamins; convalescence after surgeries or debilitating illnesses; anaemia; vaccinations; cases of immunosuppression after therapies with antibiotics, parasiticides and chemotherapic drugs; paresis and tetanies; stress of any origin; pregnancy; in young individuals and animals that practice sports, to promote adequate muscular development; in elderly animals, to fight the muscular decay typical of the old age.

**Properties** 

STIMULFOS® Pet Line for dogs is formulated as **highly palatable tablets** thanks to the flavouring action of high quality, non-allergenic (average molecular weight lower than 1000 Dalton) hydrolyzed protein of porcine origin and the use of B-group vitamins

supported by a matrix which ensures high stability and palatability.

In STIMULFOS® Pet Line three classes of constituents are associated: beta-glucans, phospholipids and B-group vitamins (B1, B2, B6, B12, PP and Calcium pantothenate).

Beta-glucans

Beta-glucans belong to a class of natural biologically active compounds, known as BRM (Biological Response Modifiers), which can have a positive impact on the efficiency of the immune system of the animal.

Their activity is greatly influenced by their origin (they can be derived from plants, bacteria, yeasts or mushrooms, with significant differences in terms of quality, quantity and activity) and their chemical-physical properties (solubility, structure, molecular

weight and number of ramifications).

The beta-1,3/1,6 glucans MacroGard® Biorigin are polysaccharides extracted from the cellular wall of the yeast Saccharomyces Cerevisiae, by a specific technique that ensures their concentration, while preserving the biological activity.

The intestine is the organ with the most intense immune activity. After their oral intake, beta-alucans interact with specific receptors found on the immune cells of the intestinal mucosa, determining and modulating the production of cytokines, increasing the activity of leucocytes (phagocytic activity) and stimulating the production of antibodies.

Phospholipids - Phosphatidic acid

STIMULFOS® Pet Line contains a specific source of phospholipids that are rich in phosphatidic acid derived from soy. These are characterized by high bioavailability and purity and are obtained with natural enzymatic methods and no chemical extraction methods. Phosphatidic acid is the simplest membrane phospholipid, as well as the fundamental intermediate for the synthesis of all other more specific phospholipids (phosphatidylcholine, phosphatidylserine, phosphatidylethanolamine and phosphatidylinositol), which are important constituents of cell membranes. As a component of membranes, phosphatidic acid accounts for 1-4% of all cellular phospholipids.

The important action of phosphatidic acid as a lipid mediator at the cellular level has only been discovered in the last 10 years. As such, it mediates and regulates several fundamental biochemical processes involved in cell viability, growth and proliferation, as well as in the reactions to endogenous hormones and to all kinds of organic and

physiological stress.

The amount of phosphorus per tablet due to the presence of phosphatidic acid (0.5 mg/10 kg bodyweight) is negligible, compared to the minimum dietary intake required in a specific diet for chronic kidney disease (300 mg/10 kg bodyweight).

**B-group vitamins**STIMULFOS® *Pet Line* contains vitamins of the B group in very high concentrations, much higher than the minimum amounts recommended by FEDIAF (Fédération européenne de l'industrie des aliments pour animaux familiers). In STIMULFOS® Pet Line these vitamins are associated to stimulate the cellular metabolism and compensate any state of deficiency or increased need in situations of metabolic stress, to maintain intact and efficient all co-enzyme systems using these vitamins.

Vitamin B1 has a positive impact on the nervous system, the cardiac muscle, in situations

of stress and intense muscular work.

Vitamin B2 is involved in biological oxidation processes and promotes normal cellular trophism.

Vitamin B6 is involved in the protein metabolism, especially in the bone marrow and in

the nervous system, in the liver and in the skin.

Vitamin B12 is involved in the production of coenzymes essential for cell growth and replication processes, especially as regards haematopoiesis, the central and peripheral nervous system and the liver.

Vitamin PP has a fundamental role in several reactions of oxidation-reduction essential

for tissue respiration.

Pantothenic acid is a co-factor in the enzymatic reactions of the oxidative metabolism of carbohydrates, in the synthesis and degradation of fatty acids, in the synthesis of steroids and steroid hormones. Its deficiency causes signs of neuromuscular degeneration and adrenocortical deficiency.

Finally, STIMULFOS® Pet Line also contains Vitamin E. Thanks to its antioxidant properties, it protects the cellular membranes of the organism by seizing free radicals and preventing their propagation.