# VeyFo® Vit

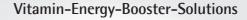
ADE-aquosum
E-Selenium-aquosum
B-Complex
B-Complex (B<sub>1</sub> forte)

























Formulations for professionals demanding peak performance

#### **Vitamins**

Vitamins are organic substances that are indispensable to the normal metabolic processes of animal organisms. They are essential to maintain health and performance and have to be supplied with the feed. In general, the animal organism itself is not able to synthesise vitamins. There are two main groups of vitamins, i.e. fat-soluble and water-soluble vitamins. A deficiency or lack of one or more vitamins ( $\rightarrow$  min. requirement) may lead to multiple metabolic disorders resulting in depressed performance of various kinds, growth retardation, fertility problems or diseases.

#### Quality and use

The products are formulated with excellent bioavailability of the organically bonded components meeting high quality standards and are produced in special clean room quality (germ free).

VeyFo® Vit ADE-aquosum, ADE-oleosum and E-Selen-aquosum are complementary feeds with particular nutritional purposes.

VeyFo® Vit B-Complex and B-Complex (B<sub>1</sub> forte) are intended to supplement the standard ration to suit the actual needs.

The products are used to supplement the daily ration to meet the increased nutritional-physiological needs as it might be necessary prior to, during and after specially demanding periods such as birth or weaning, transport, change of housing, extreme temperature fluctuations, feed changes, highly demanding animal performance or sporting activities. They can be given without any problem directly to individual animals and to groups of animals via the feed or water (oily solutions via the milk).

Application concept		Product			
		VeyFo® Vit ADE-aquosum	VeyFo® Vit E-Selenium-aquosum	VeyFo® Vit B-Complex	VeyFo® Vit B-Complex (B, forte)
As complement	ary feed with a particular nutritional purpose:				
Nutritional purpose Consecutive No.	Dietetic purpose Target species according to Directive 2008/38 EC				
I	To support the preliminary phase of oestrus and reproduction in mammals such as - cows during the last 2 weeks of pregnancy until next pregnancy is confirmed	Х	Х		
	breeding sows starting 7 days prior to until     days after parturition as well as 7 days prior to     until 3 days after insemination	х	Х		
	- in other female mammals during the final phase of pregnancy until the next confirmed pregnancy	х	Х		
	- in male animals: During the reproductive activities	Х	Х		
	- in birds such as e. g. pigeons during the laying period; in males during reproductive activities	Х	Х		
II	Reduction of the risk of milk fever (parturient paresis) in dairy cows during the last 1 - 2 weeks of pregnancy				
III	To compensate for any malabsorption/digestive disorders in poultry (except for geese and pigeons) during the first 2 weeks after hatching	Х			
IV	IV <u>To reduce stress reactions</u> in pigs				
To supplement the standard ration with nutrients					
Nutritional purposes: to compensate any nutritional deficiencies of the standard ration with nutrients and vital substances during periods of short-term increased needs.			Х	Х	Х

### Formulation/main constituents\*



Content per ml	VeyFo® Vit ADE-aquosum
Vitamin A	50,000 IU
Vitamin D <sub>3</sub>	10,000 IU
Vitamin E	20 mg

<sup>\*</sup> Note: The information given is to be understood as a general survey and is subject to alterations, especially if these do not affect the intended nutritional purpose. The latest version of the labelling of the product/packaging is always valid.

# Recommendations for use and dosage

Species Particularly demanding period within	Nutritional purpose					
the recommended duration of feeding	Consecutive No.	Daily Qty.	Duration/ days	Consumption/ animal		
Cattle – Horses						
Dairy cows, first-calf heifers						
After calving Prior to insemination	I	4 ml 4 ml	5 5	20 ml		
Mares						
After foaling	I	4 ml	5	20 ml		
Calves, foals Rearing period up to 4 months	V	2 ml	10	20 ml		
Bulls and stallions	I	4 ml	5	20 ml		
	Pigs					
Breeding sows After farrowing	I	1 ml	15	15 ml		
Boars	I	1 ml	15	15 ml		
Piglets After birth (birth stress) During weaning (weaning stress)	V	0.1 ml 0.2 ml	15 7	1.5 ml 1.4 ml		
	Small rumin	nants				
Sheep, goats After lambing Prior to insemination	ı	2 ml 2 ml	5 5	10 ml 10 ml		
Lambs Rearing period	V	0.5 ml	6	3 ml		
Rams and billy goats During reproductive activities	I	1 ml	7	7 ml		
	Pets					
Dogs After whelping/during reproductive activities	I	0.2 ml	7	1.4 ml		
Cats, rabbits, small rodents After birth/during reproductive activities	I	0.1 ml	5	0.5 ml		
Birds – Pigeons – Poultry						
Birds (via the drinking water) per 20 pigeons/aviary birds	V	0.1 ml/ I water	2	0.2 ml		
Male and female chicks after hatching for 2000 animals	III	10 ml	2	20 ml		
Turkey chicks After hatching for 2000 animals	III	10 ml	2	20 ml		

### Package size:

100 ml bottles

### Formulation/main constituents\*



Content per ml	VeyFo® Vit E-Selen-aquosum		
Sodium selenite	0.45 mg		
Vitamin A			
Vitamin D <sub>3</sub>			
Vitamin E	100 mg		

<sup>\*</sup> Note: The information given is to be understood as a general survey and is subject to alterations, especially if these do not affect the intended nutritional purpose. The latest version of the labelling of the product/packaging is always valid.

### Recommendations for use and dosage

Species Portional description and the species	Nutritional purpose	E-S	VeyFo® Vit E-Selenium-aquosum			
Particularly demanding period within the recommended duration of feeding	Consecutive No.	Daily Qty.	Duration/ days	Consumption/ animal		
Cattle	– Horses					
Dairy cows, first-calf heifers During the last 2 weeks of gestation until the next confirmed gestation After calving	ı	10 ml	2	20 ml		
Prior to insemination  Mares	-					
After foaling/during oestrus	1	10 ml	2	20 ml		
Calves, foals	V	2 ml	2 - 4	4 - 8 ml		
Rearing period up to 4 months  Bulls and stallions	1 1		2			
	igs	10 ml		20 ml		
	igs		ĺ	ı		
Breeding sows After farrowing	1	3 - 5 ml	2	6 - 10 ml		
Breeding boars	ı	3 - 5 ml	2	6-10 ml		
Piglets After birth (birth stress) During weaning (weaning stress)	IV	0.2 ml 0.2 ml	5 5	1 ml 1 ml		
Small r	uminants					
Sheep, goats After lambing Prior to service	I	5 ml 5 ml	2 2	10 ml		
Lambs Rearing period	V	0.5 ml	4	2 ml		
Rams and billy goats During reproductive activities	1	2 ml	5	10 ml		
	ets					
Dogs After whelping/ During reproductive activities	1	0.2 ml	5	1 ml		
Cats, rabbits, small rodents After birth/During reproductive activities	ı	0.1 ml	5	0.5 ml		
Bird - Pigeons - Poultry						
Birds (via the drinker) per 20 pigeons/aviary birds	I	0.1 ml	2	0.2 ml		
Other poultry: Chicken, broilers, turkeys for 1000 animals	V	10 ml	2	20 ml		

### Package sizes:

100 ml and 1000 ml bottles

### Formulation/main constituents\*



Content per ml	VeyFo® Vit B-Complex	VeyFo® Vit B-Complex (B <sub>1</sub> forte)
Calcium-D-Pantothenate	5 mg	5 mg
Nicotinamide	50 mg	50 mg
Vitamin B <sub>1</sub>	10 mg	50 mg
Vitamin B <sub>2</sub>	5.7 mg	5.7 mg
Vitamin B <sub>6</sub>	4 mg	4 mg
Vitamin B <sub>12</sub>	10 μg	10 μg



<sup>\*</sup> Note: The information given is to be understood as a general survey and is subject to alterations, especially if these do not affect the intended nutritional purpose. The latest version of the labelling of the product/packaging is always valid.

## Recommendations for use and dosage

	Nutri- tional	VeyFo® Vit B-Complex		VeyFo® Vit B-Complex (B <sub>1</sub> forte)		
Species	purpose Consec. No.	Basic provision/ animal/day	As vitamin booster*	Basic provision/ animal/day	As vitamin booster*	
Cattle – Horses						
Cattle, horses	V	5 – 10 ml	up to 30 ml	5 - 10 ml	30 ml	
Calves, foals	V	2 – 5 ml	up to 20 ml	2 - 5 ml	20 - 50 ml	
			Pigs			
Sows and boars		2 - 5 ml	up to 20 ml	2 -5 ml	20 - 50 ml	
Fattening pigs		2 - 5 ml	up to 20 ml	2 - 5 ml	20 - 50 ml	
Piglets via the	V	1 ml	2 - 3 ml	1 ml	2 - 3 ml	
wet-dry feeder			1 - 4 ml/l water		1 – 4 ml/l water	
Growers		2 ml	4 - 10 ml	2 ml	4 - 10 ml	
		Sm	all ruminants			
Sheep, goats	V	2 ml	4 - 10 ml	2 ml	4 - 10 ml	
Lambs, goat kids	v	2 ml	bis 10 ml	2 ml	bis 10 ml	
			Pets			
Dogs		1 ml	1 - 5 ml	1 ml	1 - 5 ml	
Cats	V	0.5 ml	0.5 - 2 ml	0.5 ml	0.5 - 2 ml	
Rabbits, small rodents	V	0.5 ml	0.5 - 2 ml	0.5 ml	0.5 - 2 ml	
Birds – Pigeons – Poultry						
Birds		2 drops		2 drops		
Poultry chicks	V	100 ml	500 – 1,000 ml/ 1,000 l water	100 ml	500 – 1,000 ml/ 1,000 l water	
Young animals		200 ml	1,000 – 2,000 ml/ 1,000 l water	200 ml	1,000 – 2,000 ml/ 1,000 l water	
Adult animals		200 ml	1,000 - 2,000 ml/ 1,000 l water	200 ml	1,000 - 2,000 ml/ 1,000 l water	
Pigeons		0.5 ml	0.5 - 2 ml/l water	0.5 ml	0.5 ml - 2 ml/l water	

<sup>\*</sup>To supplement the daily standard ration to satisfy the short-term extra needs during particular demanding periods.

### Package sizes:

100 ml bottles

#### Nutritional physiological role

With regard to the nutritional physiological role and biological functions of the individual nutrients and micronutrients contained in the products the following information has been extracted from the technical literature – amongst others from the AWT series "Vitamins in Animal Nutrition".

Glucose (grape sugar) is a natural key substance that forms the basis for the formation of the main reserve substances (e.g. starch, Glycogen) and the basic substance (Cellulose). Glucose also plays a key role in the degradation of nutrients. Pure Glucose in powder form is offered as "Dextrose" and is used as rapid conveyor of energy.

Vegetable oils and water are additional carrier substances.

Niacin (nicotinic acid/nicotinamide) is a component of the coenzymes NAD (nicotinamide adenine dinucleotide) and NADP (nicotinamide adenine dinucleotide phosphate). These, as coenzymes serving as hydrogen carriers, are involved in vital metabolic processes (carbohydrates, fats and animo acids). Niacin plays a key role in energy turnover.

Pantothenic acid (Calcium-D-Pantothenate) is, as a constituent of coenzyme A, involved in synthesis and degradation processes in the metabolism of proteins, carbohydrates and fats. Production of Acetylcholine for the function of neurons. Function of skin and mucous membranes. Pigmentation of hair.

**Propylene glycol** (1.2-Propanediol) belongs to the polyvalent alkanols (bivalent alcohol) and can be considered as an additional energy provider. Its energy content is quoted with 9.8 up to 16.8 MJ-NEL/kg.

Selenium as a trace element is a component of the enzyme glutathione peroxidase that is protecting cell membranes from oxidation in close cooperation with vitamin E. Certain forms of growth disorders, muscle-, liver- and pancreatic degeneration can be corrected with additional selenium. Worthy of mentioning in this connection is also the white muscle disease (together with vitamin E) in piglets, lambs and calves. It also plays a major role in the protection from mastitis and high cell counts.

**Vitamin A** is involved in formation, protection and regeneration of skin and mucous membranes (ephithelial protection). Promotion of fertility by improving ovulation and implantation of the ovum, embryonic and foetal development and hormone activation for pregnancy. Control of growth and differentiation processes of the cellular metabolism by influencing the transcription of more than 300 genes (gene expression). Increased resistance to infectious diseases.

Vitamin  $B_1$ , in phosphorylated form (thiamine pyrophosphate) is, as a coenzyme of diverse forms of decarboxylases (pyruvate dehydrogenase,  $\alpha$ -ketoglutarate dehydrogenase) and transketolases, indispensible for the breakdown processes in carbohydrate metabolism, important for nerve tissue and heart muscle function, necessary for maintaining peristalsis in the gastrointestinal tract. In the form of thiamine triphosphate it is a possible activating substance for the stimulation of peripheral nerves.

**Vitamin B** $_2$  (Riboflavin), which is present almost exclusively bound to proteins (Flavoproteins), is important as a component of coenzyme FMN (Flavin mononucleotide) and FAD (Flavin-Adenine-Dinucleotide) for: the transfer of hydrogen in the respiration chain for the production of energy, oxidation and reduction processes for the formation and breakdown of fatty acids as well as amino acids.

**Vitamin B**<sub>6</sub> as a component of coenzyme pyridoxal-5'-phosphate takes up a central place in: Amino acid metabolism in transamination, decarboxylation and racemisation of amino acids, for the breakdown of Tryptophan (as with the synthesis of Niacin), the vitamin B<sub>6</sub> dependent enzyme kynureninase is necessary, carbohydrate metabolism as a result of the participation of the phosphorylase effect.

Vitamin B<sub>12</sub> (Cyanocobalamin) is essential for the formation of blood and growth, serves for the formation of two coenzymes 5-desoxyadenylcobalamine (important for the utilisation of propionic acid and thus for glucose and lactose formation in ruminants) and Methylcobalamine (necessary for methylation reactions and thereby amongst others for methionine metabolism).

Vitamin  $B_{12}$ -deficiency results in changes of the red cell count, disorders of protein metabolism, diseases of the nervous system, skin infections, growth disorders and poorer feed efficiency.

 $\begin{array}{l} \textbf{Vitamin D}_3 \text{ regulates calcium and phosphate metabolism and especially promotes} \\ \textbf{calcium and phosphate absorption in the intestine. It controls the excretion of calcium and phosphate via the kidneys and the storage of calcium and phosphate in the skeleton. It promotes germ cell production. It increases the performance of the immune system and inhibits auto-immunisation. It controls the transcription of genes. \\ \end{array}$ 

Vitamin E reduces the production of lipid peroxyl radicals from polyunsaturated fatty acids; antitoxic effect in cell metabolism; reduces the incidence of liver necrosis and muscular degeneration; antioxidant effect, i.e. phospholipids in the cell membrane and other substances sensitive to oxidation e.g. vitamin A, carotenoids and their intermediates, are stabilised; controls metabolism of the hormones via adenohypophysis; maintains membrane stability, especially of the cardiac and skeletal muscles; controls the development and function of the gonads; stimulates antibody production (improving resistance to diseases; phagocytosis and the bactericidal effectivity of phagocytes; preparation for pregnancy and protection against abortion.

#### High performance animals require optimized feeding regimes.

We want you to be successful and do our utmost to achieve this target. All constituents contained in the products are well known in animal nutrition. They are also used as nutritional supplements in humans. The quality and processing meet the highest purity criteria. We produce our products sterile thus achieving a long shelf-life as well as a trouble-free use of the same.

#### Additional information

For shelf-life and storage information, please kindly see label.

In order to achieve a clear separation from our veterinary medicines and care products, all our feed specialities that are subject to the feedstuff law – as the present ones – are exclusively marketed and labelled under the umbrella brand "VeyFo®". They are no medicinal products and need not to be entered into the stable treatment diary.

The information given in this product brochure corresponds to the state of knowledge upon completion. Please read the package leaflets prior to using the products.

