VeyFo®

AVP-RecoTon

Amino Acids-Vitamin-Phosphorus-Mineral-Solution

Containing essential nutrients and micronutrients such as...

- Amino acids
- Vitamin-B-Complex (B₁₂ + L-carnitine highly concentrated)
- Phosphorus
- ... for the fat metabolism (lipolysis/lipogenesis) and liver functions



















Formulations for professionals demanding peak performance



Conception/Essential components for the nutritional purpose*

Liquid formulation as a solution with dihydrogen phosphate, sodium chloride, glucose und propylene glycol. In addition, the solution contains a plurality of essential amino acids, D-panthenol, the vitamins B_1 , B_2 , B_6 and B_{12} as well as the Veyx premix "AETy-Betan sensoric".

Product characteristics

VeyFo® AVP-RecoTon has been formulated with excellent bioavailability of the organically bonded components. Production and filling are carried out in compliance with the particular purity criteria under cleanroom conditions (germ-free). The product can be given without problem directly to individual animals and to groups of animals via the feed or water to appropriately supplement the standard ration. The product has been formulated as a dietetic complementary feed for the reduction of stress reactions in pigs according to the particular nutritional purposes as defined in the "List of intended uses of animal feedingstuffs for particular nutritional purposes" as well as for the needs-based supplementation of the daily ration in a variety of other animal species.

Breeding sows in particular suffer from extreme stress situations around the time of farrowing and during the puerperium as well as following the suckling period. Piglets suffer especially after weaning or when moved and re-housed. During these periods the nutrient requirements for mineral-/fat metabolism and liver function are increased. In many cases this leads to insufficient milk yield and quality in sows, resulting in bad rearing performance, unsatisfactory ovulation and gestation rates, along with other fundamental problems. In piglets it leads to bad fattening performance and increased mortality rates. Therefore, the provision of essential nutrients and minerals is of major importance.

^{*} 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.

Physiological importance

Concerning the nutritional physiological role and biological functions of the individual nutrients/micronutrients we would like to introduce you to the following information from the technical literature and (amongst others) from the AWT series "Vitamins and Amino Acids in Animal Nutrition".

Amino acids are protein building blocks, components of enzymes, in practically all tissues in the animal organism. Particularly significant (e.g. lysine) in the formation of collagen tissues and ossification: as a component of nucleotides in the cell nucleus it activates cell division. Additional metabolic functions: (e.g. methionine) in particular as a precursor of cystine and thus also of peptides such as glutathione, as the initiator of protein biosynthesis, methyl group donator. Components (e.g. threonine) of the digestive system and immune substances significant in energy metabolism, e.g. precursor for glycine synthesis.

Involved (e.g. tryptophan) in the formation of precursors of NAD (nicotinamide adenine dinucleotide) as well as in many metabolic processes via the tissue hormones serotonin and tryptamine.

The glucoplastic (= glucogenic) amino acids are essential for the energy metabolism. The glucose precursors pyruvate, α -ketoglutarate, succinyl-CoA or oxaloacetate can be synthesized from methionine, glycine, valine, arginine and histadine.

Glucose (grape sugar) is a biologically valuable nutrient provider belonging to the monosaccharide family.

L-carnitine has numerous functions in the metabolism; the most important are fat metabolism functions: in this case it serves as a carrier in the transport of active fatty acids into the mitochondria for the production of energy, as well as a reservoir for active acetyl residues. The latter is significant in case of extreme muscular activity, ketotic metabolic states as well as in hunger situations and presents quantitatively by far the highest level of demand. A high demand for L-Carnitine can occur in animals during reproduction, in young animals, high growth rates, as well as in case of liver metabolism overload.

Niacin (nicotinic acid/nicotinamide) is a building block of NAD (nicotine adenine dinucleotide) and NADP (nicotine adenine dinucleotide phosphate) and is involved in essential metabolic reactions as hydrogen transferring coenzymes (carbohydrates, fats and amino acids). It plays a key function in the conversion of energy.

Phosphorus is a skeletal building block, buffer substance in the blood and cell, essential component of nucleic acid and various lipoids and proteids, respectively. Is necessary for the production, storing and utilisation of energy and facilitates hormone function. Sufficient provision of phosphorus is the prerequisite for the intake of calcium and prevents high concentrations of liver and muscle enzymes, as well as of bilirubin and free fatty acids in the blood. It thus contributes to protection of the liver and muscles.

Phosphorus deficiency leads to reduced feed intake, retarded growth, reduced milk yield and ultimately (energy metabolism disorders) also to reproductive disorders. Rickets (inadequate mineralisation of the bones) and osteoporosis, brittle bones, respectively (high removal rates of Ca and P from the skeleton), can be caused by phosphorus as well as vitamin D_3 or Ca deficiency (pigs, poultry).

In order to maintain a limited environmental impact through the excretion of excrement, a formulation is to be favoured in which its release into the body cells occurs with low levels of loss. This is achieved in a particularly reliable way with organic compounds.

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.

Vitamin B₁ In phosphorylised form (thiamine pyrophosphate) vitamin B₁ is, as a coenzyme of diverse forms of decarboxylases (pyruvate dehydrogenase, a-keto-glutarate dehydrogenase) and transketolases, indispensable for the breakdown processes in carbohydrate metabolism, important for nerve tissue and heart muscle function, necessary for maintaining peristalsis in the gastrointestinal tract.

Vitamin B₂ (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_6 as a component of coenzyme pyridoxal phosphate takes up a central place in the amino acid metabolism, i.e. in transamination, decarboxylation and racemisation of amino acids. For the breakdown of tryptophan (as with the synthesis of niacin), the vitamin B_6 dependent enzyme kynureninase is necessary. Vitamin B_6 is involved in carbohydrate metabolism as a result of the participation of the phosphorylase effect.

Vitamin B_{12} (cyanocobalamin) is indispensible for the formation of blood and growth as well as for the protein metabolism.

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

Vitamin B-Complex (B₁₂ + L-carnitine highly concentrated)



Recommendations for use and dosage

Dietetic supplementary feed for the particular nutritional purpose:

Reduction of stress reactions in pigs that may occur around the time of parturition, during puerperium, the final stage of the suckling period resp. around the time of weaning or during transport or change of housing, to be given over a period of 1 to 7 days if possible.

Breeding sows up to 30 ml once (as top booster) or up to 5 ml daily

Piglets

up to 3 ml once (as top booster) or via the drinker 0.2 – 1.0 ml per litre or via wet mix feeders 0.5 – 1.5 ml/per litre daily

Pigs

up to 15 ml (as top booster) or up to 2 ml daily

It is recommended that a veterinarian's opinion be sought before use or before extending the period of use.

Nutritional purpose:

Needs-based supplementation of the daily ration with the nutrients and micronutrients contained in the product.

Dogs:	0.5 - 5.0 ml
Cats, rabbits and small rodents:	0.5 - 2.5 ml

For carrier pigeons and pet birds

Carrier pigeon competitions place extraordinary demands on the birds over a very short time frame. The demand for the substances contained in VeyFo® AVP-RecoTon increases dramatically. If these are not available in adequate quantities in a well absorbable form, then in particular, this can result in liver function disorders of a threatening type. It could be determined, on the basis of results - measured using the number of prizes won - that well supplemented animals were significantly superior to those not given optimum provision. The same applies during mating and rearing periods, as well as during moulting, both in pigeons and pet birds.

- Carrier pigeons: 1 ml per litre drinking water for 20 pigeons per day twice a week. On those days when it is administered, the animals should only receive the drinking water containing the dissolved VeyFo® AVP-RecoTon.
- Pet birds: 0.5 1.0 ml/kg body weight, in cachectic animals and animals where a sub-functioning liver is suspected, the product is mostly used diluted (1:3) with common salt solution or Ringer's solution in order to increase the provision of liquids.

High performance animals require optimised feeding regimes.

We want you to be successful and do our utmost to achieve this aim. All constituents contained in VeyFo® AVP RecoTon are well known in animal nutrition. They are also used as nutritional supplements as well as for parenteral nutrition in humans. The quality and processing meet the highest purity criteria. We are thus achieving a long shelf-life together with trouble-free application.

Note

To be stored out of the reach and sight of children.

Shelf-life: Original packages sealed and stored at max. 20 $^{\circ}$ C 24 months, opened and re-sealed packages 6 months. For information concerning storage, please, kindly see label.

In order to achieve a clear separation from our veterinary medicines and care products, all our dietetic and complementary feed specialities that are subject to the feedstuff law – as the present one – 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.

Package sizes

100 ml and 250 ml bottles

The information given in this catalogue sheet corresponds to the state of knowledge upon completion. Please read the label prior to using the product.

Veyx-Pharma is GMP-, QS- and VLOG-certified.

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