



natuphos® E

BASF
We create chemistry

For sustainable animal nutrition and health

We all benefit from our focus on **the science of sustainable feed that succeeds**

The world is asking for more sustainably grown animal protein. We recognize this growing demand and we are committed to addressing this in everything we do. What we offer are science-led solutions that are proven, effective and sustainable.

Natuphos® E The most proven Phytase for improved feed efficiency.

Despite the release of phosphorus Natuphos® E breaks down phytate and its complexes present in plant-based feed. It maximizes the release of phytase-bound minerals and amino acids and improves the feed energy value.

Natuphos® E contributes to a more sustainable production by supporting the preservation and efficient use of resources. This results in less feed being needed, lower resource consumption and higher efficiency.

“On the way to carbon neutrality – Let’s walk together.”

Sustainability Contribution: **Carbon Footprint**

We as BASF are leading to reduce the Product Carbon Footprint (PCF*)

2030 25% CO₂ emissions reduction (compared to 2018)

2050 zero CO₂ emissions

- We have the transparency on the PCF values of our whole product portfolio.
- Over the last 30 years we have reduced the PCF significantly.

Significant reduction of phosphorus in the environment

through the use of **Natuphos® E**



up to 50%* less phosphorus in the environment. With the addition of 500 FTU phytase* ~ 1.13 Mio t CO₂ eq. (EU) can be reduced.

In intensive production regions/areas Natuphos® E reduces the environmental influence of phosphorus eutrophication



*Source BASF: in EU: assumed 500 FTU swine 500 FTU poultry

Benefits

- Better use of dietary nutrients, such as phosphorus amino acids, zinc and other trace elements
- Optimal use of dietary energy due to reduction of antinutritional effects
- Improvement of feed conversion rate

Sustainability contribution

- Resource efficiency because Natuphos® E enhances the digestion of phytate-bound phosphorus and other complexed nutrients in feed. Therefore less mineral phosphorus, protein and amino acids needed
- Minimizing environmental impact through nutrient emissions: Up to 70 % less phosphorus and 60 % less zinc excretion through Natuphos® E
- Reduced eutrophication potential
- Less land required for manure disposal

Cost Savings: Natuphos® E saves feed phosphates (Mono Calcium Phosphate) amounts



Cost savings with Natuphos® E through a major reduction in phosphorus excretion

Natuphos® E has the potential to **replace 740.000 t of MCP** in pig and poultry feeds in EU28

Even when dosed with only **500 FTU** (calculated Natuphos® E) microbial phytase. With increased dosages of FTU higher MCP reductions are possible.

On the way to carbon neutrality Natuphos® E creates a **value of 56 Mio. EUR*** in the EU28

*Source: EU carbon price Oct. 2021 50 Euro/t CO₂e

Savings through additional energy released with Natuphos® E



Due to the elimination of the antinutritional factor phytic acid the use of the dietary energy is improved.

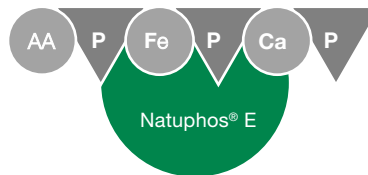
Natuphos® E maximizes the release of phytase-bound minerals and amino acids and improves the feed energy value.

The **high potential** for energy replacement offers unrivalled potential for feed cost savings.

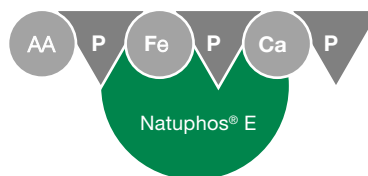
Adding **500 to 1000 FTU** Natuphos® E to **1kg** feed a range of **50-70 kcal***

(depending on the diet) are released which leads to a substantial feed cost reduction.

Please contact us, if you are interested in our matrix.



The fast and efficient release of phosphorus, amino acids, minerals, trace elements, and energy from Natuphos® E



Source: Natuphos® E Matrix, BASF

*50-70kcal/kg applied for swine

Our approach to a sustainable nutrition for animals

Natuphos® E the efficient phosphorus, energy and amino acid release provides tangible benefits – for more sustainable livestock production.

Sustainable development has been defined as the balance of economic success, ecological protection and social responsibility. To effectively manage sustainability, we support you in measuring and quantifying sustainability in each of these pillars. **Let's talk about our approach.**



Exclusion of liability clause

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