

atres PRODUKTE

Biologically-available trace element solutions

THE ATRES GROUP

ANAEROBIC TECHNOLOGY. REGENERATIVE ENERGY SYSTEMS.

ANALYTICS The atres group offers products and services for biogas plant planners, constructors and professional Specialized Laboratory operators. The company stands for individual process engineering and biological solutions with

> the goal of achieving maximum efficiency and profitability.

atres runs its own independent laboratory in Freising-Weihenstephan that specialises in biogas with modern analytics. Attached is a pilot plant for research and development.

The owner-run company was founded in 2006 by Gunther Pesta after many years of research at the Technical University of Munich in Weihenstephan. His recognised specialist knowledge, the interdisciplinary team of the atres group, and the close cooperation with science and research means that atres works with cutting-edge technology.

This particular competence distinguishes the academy and atres. Customers can use atres to guide them through the entire project - from planning and starting up to operating and expanding a biogas or waste water treatment plant - or just through the individual steps.

THE PRODUCT LINE



FOR TOP PERFORMANCE IN YOUR BIOGAS PLANT





RESEARCH

ACADEMY

Seminars · Training

Studies · Engineering

Piloting · Research · Development

CONSULTING















ATRES Owner: Dipl.-Ing. Gunther Pesta



THE ATRES C-PLUS PRODUCT LINE

Catalyst for your biogas plant

The highest priority for you as an operator is the efficiency and profitability of your biogas plant. You can only achieve this goal if you really mobilise all the reserves of your biogas plant and use the bioenergetic potential to your advantage.

The atres C-PLUS product line speeds up and stabilises the biological processes and is just right for tuning for the microorganisms in your biogas plant.

We don't work by the motto "more helps more" because an overdose of micronutrients disrupts the process stability and reduces the productivity of your biogas plant.

The security for the operator and the biological process is warranted by the comprehensive quality control and the continuous adaption of the product.

THE ATRES C-PLUS PRODUCTS INCREASE THE PROFITABILITY

Stable biology - higher profits

The atres C-PLUS products are a guarantee for the financially efficient operation of your biogas plant and improve your profit by:

- increasing the total effectiveness of the biogas plant
- speeding up and stabilising of the biological processes
- reduction of maintenance costs and plant failures
- lowering the use of feedstock
- shortening of the start-up phase after process failures



Safety of use

Owing to the high concentration of the active ingredients, the atres C-PLUS products are classified as dangerous goods. For a risk assessment specific to your application, please always contact your personal specialist consultant.

Plants certified as "organic"

Atres C-PLUS-bio can be used in companies/biogas plants certified according to the organic farming.

THE PHILOSOPHY OF THE ATRES C-PLUS PRODUCT LINE

The added quality and security

Organic chelate complexes protect trace elements. This is how we achieve added bioavailability and reduce feedstock costs.

By further developing our product line in our inhouse laboratory, we will always be able to provide added quality and security in the future. Following legal requirements, e.g. the fertiliser requirement, is of high priority. This is the only way you can be sure that our products comply with the law and are used according to the latest techniques.

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Our **universal product** with the essential trace elements that are necessary for the healthy development of the microorganisms and an efficient digestion.

CXPL

The **special formulation** with **added active ingredients** for first-time application to rapidly balance out deficiencies during digester start-up or to use briefly in emergencies to break down volatile fatty acids.

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For locations with **distinct selenium deficiencies** to increase enzymatic activity, for example of hydrogenases, for an efficient substrate breakdown.

Adapted to **high nitrogen loads** with a simultaneous sufficient supply of trace elements, particularly for use with large amounts of poultry manure.

The C-PLUS products predominantly contain iron, nickel, cobalt, manganese, molybdenum and selenium All products of the C-PLUS line are characterised by high quality and highest security for the biological process and the user.

THE SERVICE PORTFOLIO OF ATRES

Our service for biogas plant operators

- · competent advice from salesmen and from your personal specialist
- analytical accompaniment and optimisation of the use of atres C-PLUS products via our in-house laboratory
- assessment of the current process condition by investigating the fermentation broth and the data from the biogas operations logbook
- monitoring success and assessment of the use of atres C-PLUS products

Container sizes

20-litre canister, 200-litre drum, 1000-litre IBC

Shelf life

The atres C-PLUS products have a long shelf life, are resistant to humidity and are stable down to temperatures of -4°C.

Storage

Special measures must be taken for storage. Please read the safely leaflet that comes with the product and follow the safety advice.

Dosage

At the first dosage it is often necessary to use a higher amount for a shorter time than is usually necessary, to rapidly combat a lack of trace elements.

Additional additives

Generally, various other additives can be used in parallel with atres C-PLUS products. Please contact your specialist before sing other additives.

