

# Biogas



## Active Ingredients:

**Advance** is a blend of carefully selected bacteria and enzymes, including *Pediococcus pentosaceus*, *Lactobacillus plantarum*, *Lactobacillus brevis*, Xylanase and Cellulase.



## Directions:

Each 150g pot is sufficient to treat 50 tonnes of fresh forage crop. Add contents of each pot to 50 litres of fresh, clean water and mix thoroughly. Apply the solution at 1 litre per tonne of fresh forage.

Can also be applied through all low volume application systems at manufacturer's recommended rates.

## Storage:

**Contains live microorganisms and active enzymes.**

Store in original sealed packaging in a cool, dry place below 10°C. Use within 18 months of date of manufacture.

For more information on the **Advance** range of crop-specific silage inoculants and all other Volac products and services please visit our comprehensive site at:

[www.feed-additives.co.uk](http://www.feed-additives.co.uk)

## ABOUT VOLAC

Volac is dedicated to developing cutting-edge product-based agricultural solutions and species-specific programs designed to improve animal health and performance.

FAMIQS Approval  
No.:FAM-0358

Distributed by:

**NB-UK**  
NEW BREED (UK) LTD

+44 (0)1524 542 600

Manufactured by:

**volac**

Volac International Ltd  
50 Fishers Lane, Orwell,  
Royston, Hertfordshire,  
SG8 5QX, UK

[www.volac.com](http://www.volac.com)

✉ [enquire@volac.com](mailto:enquire@volac.com)

☎ +44 (0)1223 208021

**volac**

Animal Nutrition



# Advance

**BIOGAS**



# Biogas From Forage

**GET MORE ENERGY FROM WHAT YOU GROW**



# Advance

BIOGAS

Volac Advance Biogas offers exceptional quality and value in forage conservation technology and is formulated specifically to maximise energy release and maintain stability of the forage feedstock.

## Major Benefits

- More available energy for gas production
- Improves forage feedstock quality
- Less spoilage and less waste
- More stable and consistent feedstock
- Improves aerobic stability so less heating
- Inhibits mould formation
- Easy to mix and apply



## Role of Lactic Acid

**Advance** contains two forms of lactic acid bacteria to lower the pH and help get a quicker fermentation. Reduces spoilage organisms and wastage in the clamp by being active throughout the entire pH range. Improves nutrient retention by inhibiting plant enzymes, minimising nutrient loss and creating a more stable feedstock after ensiling.

## Role of Acetic Acid

Our *Lactobacillus brevis* bacteria produces acetic acid, inhibiting the heating of silage by slowing yeast and mould growth in the feedstock when subjected to oxygen ingress. Reduces dry matter loss, making more energy available for biogas production.

## Role of Enzymes

The unique mixture of enzymes in **Advance** assist in the breakdown of plant fibres increasing fermentation efficiency and metabolisable energy for use in anaerobic digestion.

## Role of Microbial Stimulants

Microbial stimulants are added to kick-start the inoculant for rapid action at ensiling, protecting and helping the bacteria in **Advance** to work at peak efficiency. This helps ensure an effective mix of the product and activation of the bacteria for the most efficient application and results.



## Trialled and Tested

If more plant material can be broken down by the actions of enzymes, such as those in Advance Biogas, as well as increased dry matter from reduction of losses in the preservation cycle, more efficient electricity can be produced from the same amount of silage input to the system.

This can be seen in an experiment carried out by the German official biogas research laboratory Eichhof Hessen for Volac.

Biogas and methane yield from the Advance treated maize silage are both higher than the untreated maize, meaning the silage has been used more efficiently to produce energy than untreated silage.

Crops treated with enzymes have more metabolisable energy for use in anaerobic digestion, thereby assisting the increase in the final biogas yield.

