



Singleton Birch

BIRCH SOLUTIONS UK LIMITED T/A SINGLETON BIRCH

Chemicals for your AD plant

Birch Solutions have formed a new partnership with a major chemical company to bring you a wide range of biogas optimisation solutions. Sourced and manufactured in Europe and delivered directly to our UK stores, in bulk, this ensures you can get the products you need when you need them.



01652 686060



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IRON (FERRIC) HYDROXIDE

WERBATEC EFIOX – *Hydrogen Sulphide scavenger*

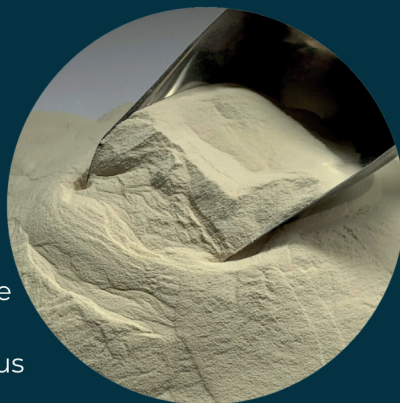


- Natural iron oxides / iron hydroxides mined in Europe
- Removal of H_2S in all feedstock environments
- Safe to handle and environmentally friendly
- Non-corrosive
- Easy to use
- 'Buffer effect' prevents spikes
- Binds H_2S as it forms
- Long lasting due to high level of micronisation and porosity

ENZYMES

Cellulase and pectinase

- Proteins that act as biological catalysts
- Improve and speed-up digestion
- Cellulase breaks down cellulose-rich feedstocks (straw, maize and silage)
- Pectinase works on feedstocks such as rye
- Facilitates agitation and viscosity control
- Enables more complete digestion and thus a significant increase in methane yield



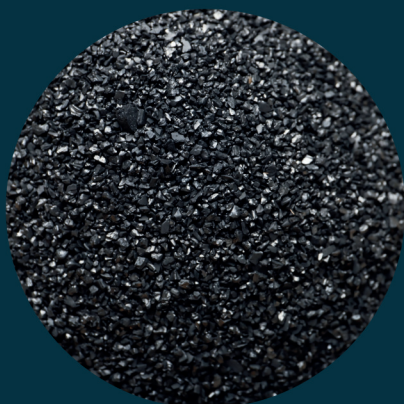
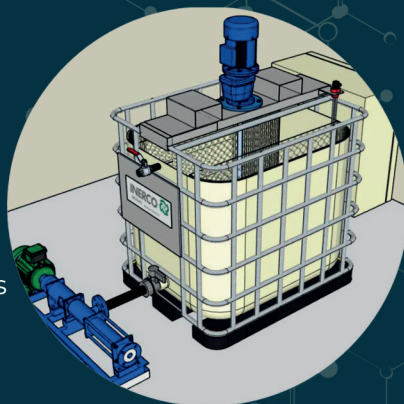
TRACE ELEMENTS



- Providing carefully balanced blends of trace elements, including: Cobalt, Nickel, Selenium, Zinc, etc.
- Ensures healthy digester function
- Supplies bacteria with essential nutrients
- Maximises methanogen activity
- Tailored blends can be provided to meet specific customer needs

PROCESSING EQUIPMENT

- Allows the transition from powdered additives into a liquid format
- Equipment to avoid handling and dust problems
- Dosing control of powders and slurry additives
- We direct customers to suitable suppliers



CARBON

A quality activated carbon that helps to remove impurities from the gas you produce to prevent corrosion across the plant and prepare for upgrading the biogas for the grid

LIME

A range of high quality lime additives sourced from our own quarry in the UK to help control the pH levels in your feedstock or slurry and create a perfect environment for digestion, helping to maximise the efficiency of your plant and the amount of gas you produce.



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CASE STUDY: WERBATEC EFIOX VS. IRON CHLORIDE

Municipal solid waste / Food waste digester

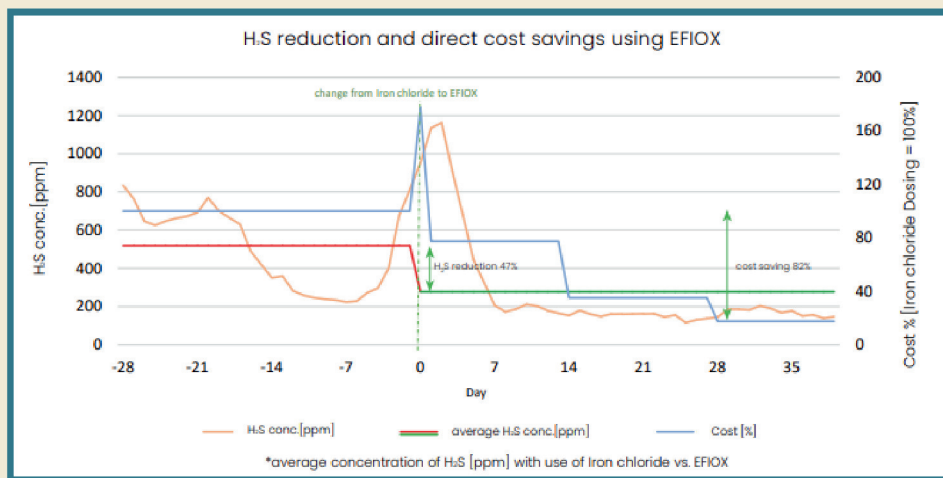
A trial was run.

- Data was recorded for four weeks while they dosed with Iron chloride.
- Dosing switched to EFIOX and the data was recorded for six weeks.

The results and benefits are:

- Consistently lower levels of H_2S using EFIOX and no spikes in H_2S .
- Employee safety is guaranteed – EFIOX is harmless.
- Treatment costs fell by 82%.
- Corrosion is sharply reduced and their carbon footprint is lower.
- They cut packaging waste and disposal.

	WERBATEC EFIOX	IRON CHLORIDE
CORROSIVITY	✓	✗
HEALTH & SAFETY	✓	✗
IMPROVED METHANE CONCENTRATION	✓	✓
PROMOTES BACTERIAL GROWTH	✓	✗
EFFICIENCY	✓	✓
LOW CO ₂ FOOTPRINT	✓	✗
UNDESIRABLE BY-PRODUCTS	NONE	HYDROCHLORIC ACID



Speak to our team for expert advice & support on the chemicals you need.

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