

# ADFe

brought to you by

  
**Amur**

## Iron Hydroxide - but not as you know it!

BY USING  
IT YOU CAN  
HELP SAVE  
THE PLANET  
TOO!



**ADFe** is an eco-friendly and extremely cost effective alternative to conventional Iron Hydroxide as a way of managing H<sub>2</sub>S levels in biogas – and it's produced in the UK!

**ADFe** is supplied in bulk bags and is a moist cake which will have a minimum dry matter content of 50% which makes it easy to handle and store

**ADFe** has a typical iron content of **46%**

\*On a dry matter basis



The Coal  
Authority



PRODUCED  
IN THE UK ✓

  
ab agri

## Discover the benefits of ADFe

ADFe is fast acting and has an extremely fine particle size. The clay like material, is made up of tiny particles which readily disperse in the digester. The large number and very small particle size of ADFe means it has overall a larger surface area, than traditional Iron, resulting in a faster binding action of the hydrogen sulphide.

**This is very similar to adding caster sugar to a cup of tea instead of a sugar lump. The caster sugar will dissolve almost instantly, while the sugar lump may take some time to dissolve.**



ADFe's effectiveness can prolong the time needed between Carbon changes compared to traditional iron hydroxides, resulting in significant savings.

ADFe is recommend being fed once a week rather than daily which saves time unless you need to control spikes in H2s

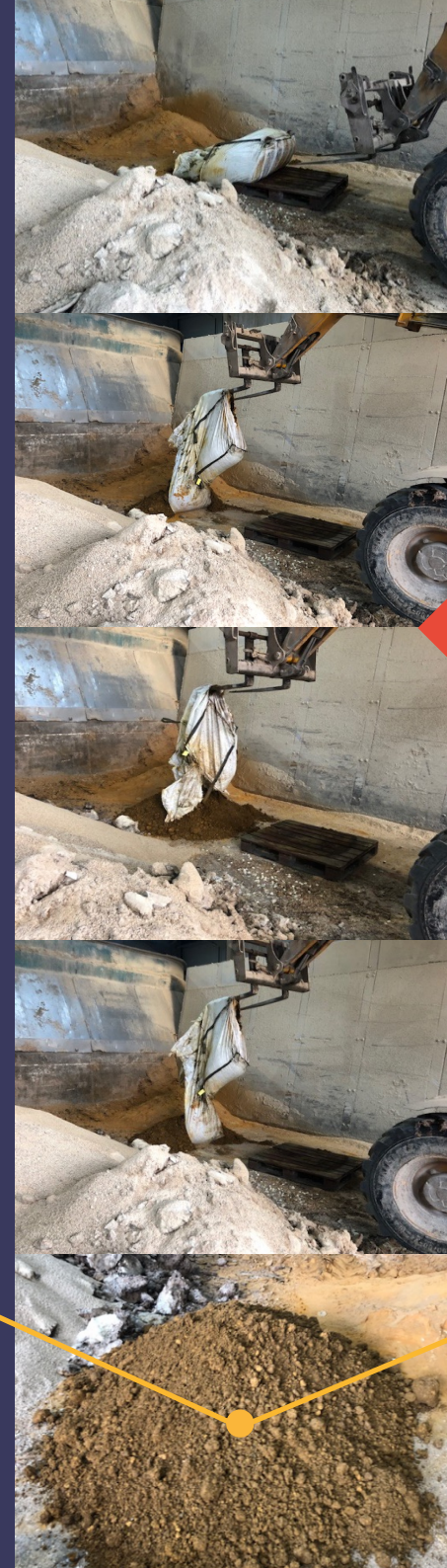
ADFe is produced by the British Coal Authority who have invested in unique equipment that creates a solid material from a solution (which is why the particle size is so fine). This is known as ochre. The ochre is then blended into a consistent product which has a high specification, and is produced to strict quality controls.

ADFe is recommended to be fed at a substitution rate of 1.3 tonnes of ADFe to 1 tonne every one tonne of traditional Iron Hydroxide.

ADFe's carbon footprint is much lower than other sources of Iron Hydroxide as it is produced in the UK (meaning less miles of transportation) and no carbon is produced as a result of the drying process – by using this product you are also helping to save our planet!



◀ ADFe is supplied as a moist cake for easy handling & storage.



## Easy to store

- As ADFe is moist it can be stored outside without adverse effects
- The large bags will be delivered on pallets for ease of use
- The bags will weigh no less than 650 kgs

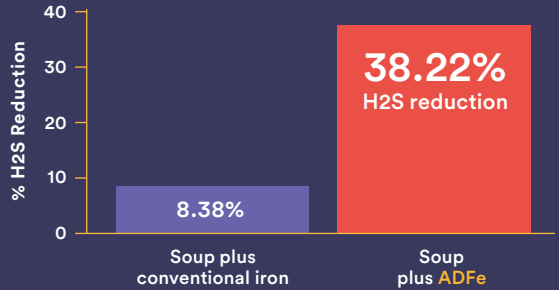
## Easy to handle

- You just rip the bag open using the forks of the forklift and then pull the bag away from it
- Then scoop up the ADFe and put on top of your other solid feeds

IS THIS  
THE BEST  
THING SINCE  
SLICED BREAD?  
WE THINK IT IS  
WHEN TRYING TO  
CONTROL H2S IN  
AD PLANTS

# Trial data on ADFe's effectiveness

Trial data shows that ADFe is typically **30% more effective** than traditional iron hydroxide at reducing H2S!



	SOUP	SOUP PLUS CONVENTIONAL IRON	SOUP PLUS ADFe
BMP as fed	82	86	79
H2S			
3	55	53	32
7	46	40	27
14	35	34	25
21	30	27	18
28	25	21	16
Average	38.2	35	23.6
% H2S Reduction		8.38%	38.22%

## Helps extend the life of your carbon

■ 18 months of trials at Amur's own AD plant (which is gas to grid and fed on food waste) has reduced the amount of iron hydroxide by roughly a third using ADFe, while also **extending the life of carbon filters** from typically changing them every 55 days to every 75 days.

■ Due to the efficiency of this product, Amur have **saved £100 per day** on its carbon costs which equates to **£36500 per annum**.



For more information, please contact the Amur team  
Visit [amurenergy.co.uk](http://amurenergy.co.uk) or email [amur@abagri.com](mailto:amur@abagri.com)

