



## **Ecosyl with Double Action**

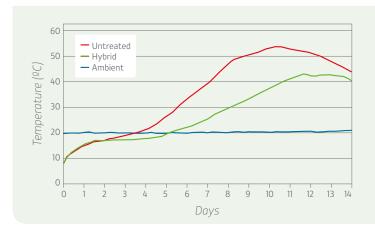
Double Action technology combines the biological action of the MTD/1 inoculant with the chemical action of potassium sorbate, a safe, non-corrosive, food and feed-approved preservative, in a single, easy-use pack..

### Chemical action

Potassium sorbate preservative is a very effective inhibitor of the yeasts and moulds that cause aerobic spoilage.

A trial with 38% DM grass at AFBI, Hillsborough, showed how DA Ecostable can reduce both the rate and extent of aerobic spoilage of high DM silages.





Effect of DA Ecostable on high DM grass (38% DM)

'It is evident that the additive significantly improved the aerobic stability of the silage.' Dr D Patterson AFBI, Hillsborough (2000)

### In the AFBI trial:

Both time to start heating and the maximum temperature reached, were reduced with DA treatment.

	Untreated	DA Ecostable
Time to start heating (days)	4.0	5.8
Max temp (°C)	57.3	46.8
Accumulated heat over 8 days (°C)	86.6	26.9

Similar results have been found in extensive trials and on-farm studies across the UK. Trough life has also been extended.





## **Biological** action

MTD/1 is the unique high performance strain of *Lactobacillus plantarum* proven over a wide range of crops and ensiling conditions to improve fermentation and animal performance.

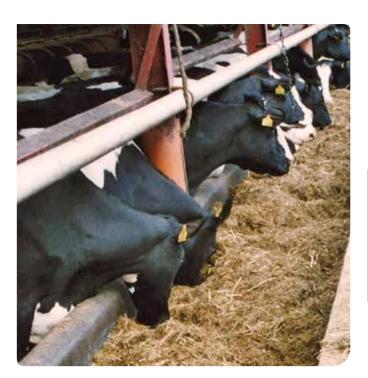
#### Performance improvements

- 5% higher intake
- 3 'D' extra digestibility
- 1.2 litres more milk

#### Reliability

- 200+ fermentation trials
- 40 intake/digestibility/ME trials
- 33 animal performance trials

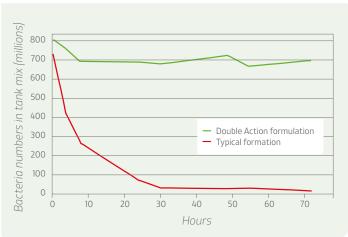
In the drive to improve dairy cow intakes and efficiency of milk production from forage, more farmers are producing high DM grass silage. MTD/1 is proven to be particularly effective at improving milk production in these conditions, delivering an extra 1.3 litres/cow/day on average across seven independent dairy trials with high DM silage.



### **Double Action**

High dry matter (DM) crops are more prone to aerobic spoilage, especially at feedout, resulting in high DM losses and significantly reducing their potential intake and production advantages. Potassium sorbate is a very effective inhibitor of the yeasts and moulds that cause aerobic spoilage but, because it is also inhibitory to bacteria, it cannot normally be combined with a lactic acid bacteria inoculant. Development of unique formulation techniques has enabled MTD/1 bacteria and potassium sorbate to be combined in DA Ecostable as a single product.

As the graph below shows, without this special formulation almost half of the inoculant bacteria are killed by the sorbate within 4 hours of making up the tank mix while the bacteria in the DA formulation are unharmed.



Trials have proved that mixing MTD/1 bacteria with sorbate results in no reduction in the performance of the inoculant with no difference in the amount of lactic acid produced or pH achieved.

	Untreated	MTD/1	MTD/1+ Sorbate
рН	4.5	4.0	3.9
Lactic acid (g/kg DM)	7.6	16.5	16.3



# Mixing and application

- Available for a liquid or dry application
- One pack treats 50t of forage
- Liquid application at 2 l/t
- Tank mix life: 48 hours
- Dry application at 500 g/t
- Shelf life (unopened): 30 months in a cool, dry place.
  Use opened bags within 3 days
- GMO free











MTD/1 is a natural bacterial strain first isolated in the UK by British scientists. It is manufactured and packaged in the UK.

#### For further information:

