Typical dry matter analysis	Biomag 3.5%	Promag 3.5%
Dry Matter (%)	58	53
Sugars (%)	45	32
Protein (%)	3.9	15
ME (MJ/kg DM)	9.4	9
Vitamins & Minerals	1	Х

Vitamin	Inclusion (IU/kg)
Vitamin A	42000
Vitamin D3	8000
Vitamin E	150

Mineral	Inclusion (mg/kg)	
Cobalt	3	
lodine	20	
Manganese	400	
Zinc	400	
Selenium	2.5	

^{*}Copper can be included at extra cost.

ED&F Man have designed a tailored vitamin and mineral package based on typical UK grass and silage levels, so as not to over supply or under supply the requirements of livestock. The package delivers the necessary vitamins and trace minerals that are essential to livestock health and performance. It is advised that when using this package on farm that no other form of trace element supplementation is used in combination and nutritionist advice is followed to ensure all animal requirements are met.

Delivery size options: 1 to 29mt

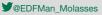


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Biomag & Promag

Molasses based liquid feed supplementation to protect against grass staggers





Why opt for magnesium in molasses?

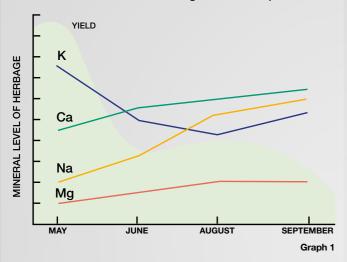
Kev Benefits

- Molasses based liquid feeds are a source of highly palatable, highly fermentable sugar.
- Sugars help to mask the bitter taste of magnesium ensuring intakes are not negatively affected and effective supplementation is achieved.
- Sugars increase rumen function and activity which helps reduce the risk of grass staggers through the prevention of excessive build-up of ammonia in the rumen.
- Research has shown that sugars speed magnesium absorption across the gut wall.
- ED&F Man Liquid Products only use magnesium chloride which is the most bio available form of magnesium to the animal.

Magnesium deficiency, also known as hypomagnesaemia, grass tetany or grass staggers, occurs when the output of magnesium exceeds the intake. The clinical signs can occur very quickly as ruminants depend on a constant dietary uptake of magnesium since magnesium metabolism is not regulated.

Magnesium Challenge

The increased risk of grass staggers at spring turnout is caused by rapidly growing grasses which are typically low in magnesium, as shown in Graph 1. The low concentration of magnesium can further be reduced by fertilisers due to potassium directly inhibiting the uptake of magnesium by the grass. Additionally, lush pastures are low in fibre and increase the rate of passage of food material through the rumen which reduces the time available for magnesium absorption.



Magnesium-rich bulk molasses

Ideal for producers who order bulk molasses, i.e. 10 tonnes at a time, and tend to buffer feed at turnout. The percentage magnesium inclusion can be varied to suit feeding requirements.

Magnesium Inclusion in Blend %	Feed Rate to achieve 35g supplement (kg)
3.5	1
3	1.2
2.5	1.4
2	1.75

Biomag 3.5% and Promag 3.5%

Biomag 3.5% is a molasses based liquid feed supplement which contains 3.5% magnesium, as fed, to help prevent staggers, as well as sugars, essential vitamins and trace elements. Promag 3.5% contains the same level of magnesium as Biomag 3.5% with a higher protein level but without the added vitamins and trace elements. Both blends are suitable for feeding to both cattle and sheep.

When to use Biomag 3.5% and Promag 3.5%

In spring and late summer

At this time the availability of magnesium in grass is reduced putting stock at risk of grass staggers, and in extreme cases even death, due to low blood magnesium levels (hypomagnesaemia).

In the autumn

A shortage of quality grass at the end of the growing season can result in animals not having sufficient access to magnesium from grass. Autumn calving cows, with their higher demand for magnesium, are at particular risk of developing grass staggers.

■ Pre-calving dairy cows

Magnesium supplementation helps balance the mineral metabolism (especially calcium) in pre-calving dairy cows when high potassium forages are being fed, and helps reduce incidence of milk fever and metabolic disorders.

■ Promag 3.5%

In situations where the feeding regime already supplies appropriate levels of sugars, vitamins and minerals the alternative feed is Promag 3.5%.

Recommended daily intakes: 1.0kg/head/day for cattle and 0.2kg/head/ day for sheep.