


Metabolic Technical Support Sheet

Name	Minject 4 in 1	
Active	330g/L Calcium Borogluconate 51g/L Magnesium Hypophosphite 182g/L Glucose	
Pack Sizes	350ml & 500ml	

Milk Fever and Associated Metabolic Diseases:

Milk Fever (hypocalcaemia deficiency of calcium in the bloodstream) in sheep and cattle is a metabolic disease which occurs when calcium levels are depleted in the animal. We mainly see it in high producing dairy cows. It is often complicated by concurrent phosphatemia and hypomagnesaemia (low blood levels of phosphorus and magnesium). The disease may be mild, moderate or severe and most commonly occurs within 48 hours before or after calving.

Milk fever is more common in older or overweight cows as there ability to mobilize calcium is reduced.

Symptoms:

- Loss of appetite
- Constipation
- Muscle weakness which may cause the cow to stagger and/or go down

Treatment:

Dosage: (Subcutaneous)

- Cattle 500ml
- Sheep 70ml

Note: Intravenous injection dosage will vary on the severity of the case and should only be performed by Vets as incorrect administration can lead to heart attacks and death.

Directions:

Warm the solution to body temperature by placing under your arm. Snap off the tip and ensure the solution is running freely. Disinfect the injection site and connect

The needle and administer under the skin of the neck or over the ribcage. Gently squeeze the bag to inject the solution. The area may be massaged following the injection to allow for quicker absorption of the solution and reduce the risk of tissue reaction (site reaction). Repeat in 6 hours if complete recovery does not occur and seek veterinary advice.

Additional Information:

The dose rate of 500ml is quoted as a guide to preventing the condition or treating a mild case. Higher dose rates will be required to treat 'downer cows' or cows with more severe symptoms. The size of the cow and breed will also impact on the dose rate required.

If the animal is down then the product should be injected intravenously by a vet until the animal is back on its feet. Then the animal should be treated subcutaneously for slower release of the actives over the next 6 hours. After 6 hours the animal should be given a dose of products such as Over the Moon and Caljet Oral which will provide 24 hours of protection against a relapse.

Useful Tips:

Minject 4 in 1 or Calject CBG? Minject 4 in 1 is used when the lack of calcium in the blood stream is complicated by a lack of magnesium and phosphorus, hence the need for additional actives.

For 24 hours protection use "Over the Moon" or "Caljet Oral" in conjunction with Minject 4 in 1.

Often an animal will be found flat, down and blown up first thing in the morning after enduring a cold night. In this case prop her up and seek Veterinary advice immediately.

Large volumes should be administered over multiple injection sites, this will help avoid site reactions.

Magnesium slows the heart rate and Calcium increases the hear rate. We have to be careful how much we administer as we don't want to interfere too much with this heart rate too much as this can be fatal.

For Further information please call.