

# Energy bolus



**Article number**  
102091

**Dietetic mineral feed**

**Animal species**  
cattle

**Content**  
12 pieces x 75 g

GMP+ FSA-assured  
GMO controlled  
PDV103322

## Ketosis

It is a common ailment in dairy cattle: ketosis, also referred to as acetonemia. Research has shown that in the first two months after calving more than one out of ten cows suffers from clinical ketosis (Veeteelt, February 2nd, 2012). The percentage of cows suffering from subclinical ketosis is much higher. Ketosis originates from a negative energy balance. This is caused by the tremendous increase in milk production after calving, with feed intake lagging behind, leading to an energy shortage for the lactating cow.

Cows in a negative energy balance mobilize their bodily fat reserves to fulfill their energy requirement. The functioning of the liver is crucial in this process, because this organ is responsible for the conversion of body fat into available energy. Often, the liver gets overloaded in this stage, and is not able to function properly, leading to incomplete breakdown of body fat. In that case, ketone bodies (acetone, beta-hydroxy-butyric acid (BHBA)) are formed. When the concentration of ketone bodies in the blood reaches a certain level (BHBA > 1.20 mmol per liter), the cow is diagnosed as suffering from ketosis. Cows are lethargic, eat less, produce less milk, and are more susceptible to health problems like uterus infections (metritis) and displaced abomasum. Also, the fertility will be compromised. Ketosis, therefore, represents a major loss for the dairy farmer and should be prevented as much as possible.

## Topro Energy bolus

The Topro Energy bolus has been developed to reduce the risk on ketosis. The bolus dissolves easily and is administered to dairy cows after calving and at lactation start. The bolus contains rapidly available energy in the form of calcium propionate, and is especially recommended for cows with a high body condition score (BCD >4), as well as for cows with decreased feed intake immediately after calving.

## Composition

Sea algae (Phytmolithon calcareum), magnesium oxide, maltodextrin, calcium stearate.

## Technological additives

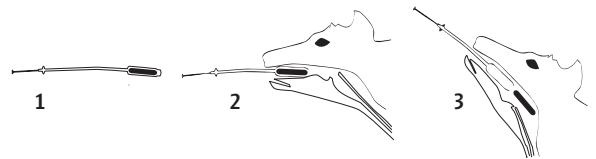
Sodium propionate ..... 650.000 mg/kg

## Storage advice

Keep product cool, dry and out of reach of children.  
Protect against frost.

## Instructions for use

- 2 boluses at calving, or in case of a strong negative energy balance
- 2 boluses 12 hours later
- 1 or 2 boluses 24 hours later
- 1 or 2 boluses 36 hours later



- Administer with a suitable bolus applicator.
- We recommend consulting a veterinarian or nutritionist before use.
- During the supply of calcium or sodium propionates at the end of gestation, an evaluation of the mineral equilibrium in association with the risk of hypocalcaemie after parturition is necessary.

## Product characteristics

Propionate	Is essential for gluconeogenesis in the liver; offers rapid energy.
Bolus	Easy to administer. Guaranteed absorption.

