

INSEMIN

- Enhanced signs of oestrous
- Improved efficiency of insemination
- Supplements energy deficiencies
- Limited incidence of ovarian cysts
- Supplements essential amino acid and vitamin deficiencies
- Enhanced oestrous synchronisation



➤ INSEMIN

INSEMIN is a liquid formulation intended for ruminants recommended for so-called silent oestrous and for enhancing the efficiency of insemination.

The problem of "silent oestrous" affects high-yield dairy cows which are diagnosed with energy deficiencies or inadequate feed balance. Deficiencies of essential amino acids result in the formation of excessive amounts of ammonium ions, which consequently adversely affect reproduction.

INSEMIN

> PURPOSE

INSEMIN is used in cows during the period of oestrous or prior to insemination only.

> COMPOSITION (in 1 kg of product)

Feed materials:

**Sorbitol (13.5.5), Sodium chloride (11.4.1),
Crude lecithins (2.21.1)**

Feed additives:

Nutritional additives:

Vitamins, pro-vitamins and chemicals with similar effects to vitamins:

Vitamin A (3a672b)	510 000 IU
Vitamin D3 (3a761)	80 000 IU
Vitamin E (3a700)	1265 mg
Beta-carotene (3a160(a))	6 mg

Amino acids, their salts and analogues:

Lysine (3.2.3)	3 800 mg
L-methionine	1 600 mg
L-tryptophan produced by fermentation with <i>Escherichia coli</i> CGMCC 7.59 (3c440)	140 mg

Sensory additives:

aromatic substances	500 mg
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Technological additives:

preservatives: potassium sorbate (E202)	3 000 mg
citric acid	1 000 mg
antioxidants: BHT (E321)	40 mg
BHA (E320)	40 mg
emulsifier: glyceryl polyethyleneglycol ricinoleate (E 484)	9 000 mg

> USE

When silent oestrous occurs:

- 500 mL per animal as an infusion into the mouth. Repeat after 10 days

Before insemination:

- 500 mL per animal as an infusion into the mouth, 4–12 hours prior to the planned insemination

Shake before use.

> INDICATIONS

- silent oestrous
- low effectiveness of insemination
- energy deficiencies

> PROPERTIES

INSEMIN when used at the right time during ruminants' oestrous cycle, it has a regulatory effect on the reproductive system. Thus, it enhances the signs of oestrous and improves the efficiency of insemination.

Vitamin A and beta-carotene play an important role in regulating the oestrous cycle. Deficiencies in these substances may lead to fertility disorders and may increase the incidence of so-called "silent oestrous". Beta-carotene supplementation should be accompanied by supplying adequate amounts of vitamin E and proteins.

Tocopherol enhances processes preventing the degeneration of the ovaries and ensures proper maturation of graafian follicles. Sufficient levels of this substance in feeds also enhances embryo implementation in the uterus.

High-yielding cows receive feed rich in proteins. This is fully absorbed only in the presence of the essential amino acids methionine, lysine, tryptophan.

Essential amino acid absorption may be impaired, excessive amounts of ammonia may be produced, and consequently, reproduction performance may deteriorate.

> BENEFITS

- **enhanced signs of oestrous**
- **improved efficiency of insemination**
- **supplements energy deficiencies**
- **limited incidence of ovarian cysts**
- **supplements essential amino acid and vitamin deficiencies**
- **enhanced oestrous synchronisation**
- **easy-to-use**