CMT INPEL

SUBSTANCES FOR DIAGNOSTIC USE

Health Registration No.: RIP-02-FAR-01835 AGROCALIDAD

Formula:

Each 100 ml contains:

Sodium lauryl sulfate	2 g
Gentian violet	0.0033 g
Excipients q.s.	100 mL

SPECIES



INDICATIONS

CMT INPEL is a veterinary reagent for the rapid detection of subclinical mastitis in dairy cows through indirect estimation of somatic cell count. Ideal for routine on-farm monitoring, it enables early intervention and contributes to the health management of the dairy herd.

ROUTE OF ADMINISTRATION: N/A.

MECHANISM OF ACTION

The California Mastitis Test (CMT) is a recognized, economical, simple, and rapid (though not very accurate) method for detecting mastitis. It is performed by adding a sodium lauryl sulfate reagent to destroy the cell membranes present in the milk and release their DNA. Upon contact with the reagent, the DNA forms a visible gel. The changes are evaluated visually using a five-point scale (negative, trace, weak positive, clear positive, strong positive).
The CMT test indirectly measures the somatic cell count and estimates the pH of milk samples.

Sodium Lauryl Sulfate
It is an anionic surfactant used as a test reagent to detect subclinical mastitis in dairy cows. Its action is based on reducing surface tension; it alters the structure and conductivity of the cell membrane and nucleus, interferes with osmotic balance, blocks oxidation, and stimulates the proteolytic enzymes, and increases the viscosity of milk.

Gentian Violet It is a triphenylmethane dye or pigment, a biological colorant, and a topical antiseptic. It is used in clinical and bacteriological laboratories as a stain for biological samples, as it allows for the visualization of cellular and histological morphology and helps distinguish bacteria. It is used to detect the presence of bacteria in countless biological assays and also serves as a pH indicator, changing color from yellow at pH 0.0 to blue-violet at pH 2.0.

PRECAUTIONS – WARNINGS - CONTRAINDICATIONS

Not applicable. This product is intended for diagnostic use only; it must not come into contact with the animal or be introduced into the body.

DRUG INTERACTIONS

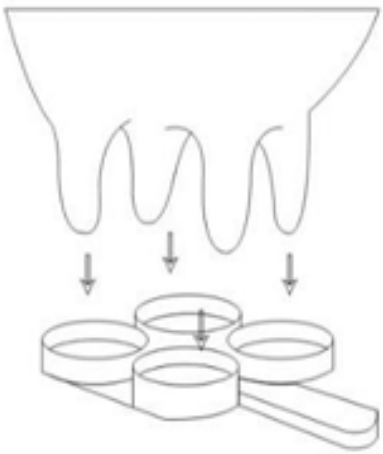
Not applicable

WITHDRAWAL

Not applicable

COMMERCIAL PRESENTATIONS

500 mL bottle
1000 mL bottle

DOSAGE		
Use/Intended Use	**Directions for Use**	
Cow's Milk		1. Wash, dry, and disinfect each udder. 2. Milk manually and discard the first two spurts from each quarter. 3. Place 2–3 mL of milk from each mammary quarter into a separate well on the test plate. 4. Add an equal volume of Inpel CMT reagent to the same well. 5. Swirl the test strip in a circular motion until a homogeneous mixture is obtained. 6. Wait 10–20 seconds before reading the results.

READING AND INTERPRETATION OF RESULTS		
Degree of Reaction	**Types of Reaction**	**Clinical Interpretation**
(-) Negative	Liquid sample, no precipitates	Healthy mammary quarter
(±) Traces	Slight precipitation that tends to disappear	Possible presence of subclinical mastitis
(+) Positive Weak	Mild precipitation, without gel formation	Subclinical mastitis - Grade I mastitis
(++) Moderately positive	Moderate gel formation	Moderate mastitis - Grade II mastitis
(+++) Positive Strong	Thick, well-defined gel	Severe mastitis - Grade III mastitis