

Delvotest[®] SP MINI - NT Starter Kit

Instructions for use

Introduction

Delvotest[®] SP MINI - NT is a test system to control milk for the presence of antibacterial substances such as antibiotics and sulphonamides.

In the Delvotest[®] Starter Kit all required materials to carry out the Delvotest[®] ampoule presentation are included. This technical bulletin describes the use of all materials in this Kit.

Preparation

Everything that comes into contact with milk (hands, containers, equipment) must be thoroughly cleaned and rinsed with clean water. This prevents the sample from being contaminated by inhibiting substances. A tiny amount of mastitis medication can render a large quantity of milk unfit for use; it takes the contents of only one mastitis injector to spoil more than 100,000 litres of milk!

Milk sample

The cow to be examined must be milked out completely into a bucket or container. Stir the milk well and carefully take a sample, for example with a cup. If it is not possible to test the milk sample directly, it should be kept in the refrigerator or other cool place. Delvotest[®] SP MINI - NT is intended for checking cow's milk. Caution: Delvotest[®] must not be used for milk which is sour or contains contaminants of a general nature.

Before testing

Work on a clean surface. Wash and rinse hands thoroughly. Take care that tips of the disposable pipettes are not touched by hand. Switch on the heating device 10 minutes or more beforehand. Read the instructions for use. Check the temperature before use (it must be 64°C plus or minus 0.5°C). Set the timer for the use of Delvotest[®] SP MINI - NT (see instructions for use).

How to use the Delvotest[®] test kit

(Additional information in Technical Bulletins is available at your DSM distributor)

Directions

- Cut off the required number of ampoules from the block with scissors or a knife. Be careful not to damage the foil from the adjacent ampoules (do not tear off ampoules).

- Take one ampoule and label for identification for each milk sample to be tested. Place the ampoules in the special holes in the Delvotest[®] box.
- Open the ampoule by punching a small hole in the aluminium foil with for example the blunt end of the syringe (do not remove foil from ampoules).

Add milk samples

- Place a fresh disposable pipette onto the syringe for each milk sample to be tested.
- Add the milk sample (0.1 ml) by depressing the plunger of the syringe completely and insert the tip of the pipette approx. 1 cm into the milk sample and allow the plunger slowly to return to the start position.
- Transfer the milk sample in the pipette (0.1 ml) completely to the correspondingly labelled ampoule. This is done by depressing the plunger slowly, adding the milk straight onto the agar.

Incubate the test at 64°C

- Place ampoule(s) in a preheated water bath or dry incubator (dry incubators are available from your DSM distributor) at 64°C ± 0.5°C. Incubate the ampoules for Delvotest[®] SP MINI - NT for 3 hours.

Reading

- After incubation of the ampoules (3 hours / 64°C) withdraw the ampoules from the water bath or incubator and read the test results. The results should be read from the lower 2/3 of the agar.

A yellow colour indicates the **absence** of antibacterial substances in the related milk sample at a concentration at or above the test's detection limit.

A yellow/purple colour indicates the **presence** of antibacterial substances close to the test's detection limit.

A purple colour indicates the **presence** of antibacterial substances in the related milk sample at or above the test's detection limit.

Information on sensitivity and on reading the test colours is available via your DSM distributor.

Instructions for the use of the DSM

Dry incubator

(Additional information in Technical Bulletins is available at your DSM distributor)

Procedure

The dry incubator should be placed on a level surface and connected to an earth-connected socket with the appropriate alternating current. The incubator is turned on with a switch: the indicator light glows. After about 5-10 minutes this light will flash, indicating that the temperature has reached the value set (64°C) and that ampoules can be placed in it. If time permits, it is advisable to wait some 10 minutes more for a better stabilisation of the temperature through the entire heating block of the dry incubator. Disconnection of the main supply is done by removing the mains plug from the wall outlet.

Precautions

The incubator must be properly earthed and should not come into contact with water or other liquids. Test procedures should take place in a room with a constant temperature. The incubator must not be placed near an open window or in a draught. In the event of several tests being done on the same day, it is advisable to leave the incubator switched on. It is best not to put new ampoules into the dry incubator during a running test as this could lower the temperature and might increase the incubation time of the other ampoules. Place the ampoules as far as possible into the holes of the dry incubator.

Instructions for the use of the Delvotest® timer

Setting the required period of time

Set the **Clock/Time** switch to **Timer**. Press the **Reset** button, after which the indication for hours, minutes and seconds shows **00**. Using the **HR** and **Min** buttons, set the required time on the screen: for Delvotest® SP this is 3 hours. If the **HR** and **Min** buttons are pressed for longer than 2 seconds, time setting will be accelerated.

Procedure

Immediately after having placed the Delvotest® ampoules into the dry incubator, press the **Start/Stop** button once. The displayed time will proceed to zero; when reaching the end of the time set, the timer will bleep for one minute (maximum). In the meantime, the displayed time will be visible again. The timer mechanism is stopped by pressing one of the buttons **Start/Stop** or **Reset**.

Use as a clock

When setting the **Clock/Timer** switch to **Clock**, the time will be shown. To set the correct time in hours and minutes, press the buttons **Set** and **HR** or **Min** or **Sec** simultaneously.

Battery replacement

Turn the white button at the back of the timer to the indicated position by using a coin. Replace the battery with a new one of 1.5 V, size G-13; take care that the + side is facing outwards. Close the lid with a coin. Times that have been set before the replacement should be reset.

Securing the timer

The timer can be fixed to an iron or steel surface with a magnet. When during the performance of a test the timer is taken to another area, take into account the time needed to return to the heating device in time. The timer can be attached to clothing with the clip at the back. This clip opens on pressing the rounded part. Another possibility is placing the timer on end by opening the clip and letting the metal clasp come out.

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