

## 941-0006 SP1-Cassette<sup>™</sup> – 10 x 10 units

#### **Contents**

Box with 100 SP1-Cassettes™ (10 bags each containing 10 SP1-Cassettes™).

### **Application**

The SP1-Cassette<sup>™</sup> is a part of the NucleoCounter<sup>®</sup> SP-100<sup>™</sup> system, which is comprised of the Lysis/Dilution Reagent S100TM, the SP1-Cassette<sup>™</sup> and the NucleoCounter<sup>®</sup> SP-100<sup>™</sup>. An optional part of the system is the SemenView<sup>™</sup> software, which offers a variety of advantages to the user. The NucleoCounter<sup>®</sup> SP-100<sup>™</sup> system is designed to count the total number of sperm cells in a sample of livestock semen.

### **Usage**

The SP1-Cassette™ is a custom made disposable plastic device designed for optimal sample handling and safe disposal. The main features of the cassette are the piston, the flow system containing immobilized propidium iodide, and the measurement chamber.

The cassette is loaded by gently pressing the piston when the tip of the cassette is immersed into the sample mixture. Approximately  $60~\mu l$  of sample mixture is loaded into the cassette. The immobilized dye, located in the first three lanes of the flow system, is dissolved by the sample mixture and stains the non-viable cells. The loaded cassette is placed in the instrument and the analysis initiated. The piston is automatically moved further into the cylinder making the sample mixture flow through the mixing channels until it reaches the measurement chamber. The non-viable cells are stained by the dissolved dye. Finally the image of the sample mixture is taken using fluorescence technique.

During production each cassette is marked with a black dot code, which is used for exact calculation of the analysed volume.

**Caution!** In order to avoid contaminating the clear window of the measurement chamber it is important not to touch the window when handling the cassettes.

For detailed procedure for the analysis refer to the User's Guide for the instrument and the appropriate Application Notes.

#### Stability

For sealed bags refer to the expiry date on the bag.

After unsealing the bag the SP1-Cassettes™ expire after 2 weeks. During this period the SP1-Cassettes™ must be protected from moisture and light. This may be achieved by closing the bag with a clip.

#### **Storage**

Store at room temperature.

# Safety information

Each SP1-Cassette™ contains approximately 2 µg of Propidium Iodide (PI). Therefore, it must not be attempted to unload the SP-1Cassette™.

If a leak is observed from a SP1-Cassette™ discard the cassette immediately and perform a clean-up of the area which may have been in contact with content of the SP1-Cassette™. Dispose of protective gloves or was hands thoroughly if gloves are not used. A small droplet can often be observed at the tip of a loaded SP1-Cassette™, this is not a leak but excess liquid that has not entered the SP1-Cassette™.

# Disposal of Used Cassettes

After use the SP1-Cassette™ should be disposed of in accordance with applicable National, Federal, Local and State laws and regulations.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

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