## 910-0300 Reagent Y100 – 500 ml

## **Contents** A neutral aqueous solution containing sodium chloride, sodium dihydrogen phosphate,

cetylpyridinium choride monohydrate and octylphenol ethoxylate. The pH value is between 6.9

and 7.1.

## **Application** Reagent Y100 (Lysis buffer), is a part of the NucleoCounter® YC-100™ system comprising of

Reagent Y100<sup>TM</sup>, the NucleoCassette<sup>TM</sup> and the NucleoCounter<sup>®</sup> YC-100<sup>TM</sup>. An optional part of the system is the NucleoView<sup>TM</sup> software, which offers a variety of advantages to the user. The NucleoCounter<sup>®</sup> YC-100<sup>TM</sup> system is designed to determine the total concentration of yeast

cells in a sample.

## **Principle** In order to count the total number of yeast cells, a sample containing the yeast cells is treated

with Reagent Y100. Reagent Y100 buffer permeabilize the yeast cell wall and membranes, rendering the DNA of the yeast cells susceptible to staining with propidium iodide. Reagent Y100 also has the purpose of diluting the yeast sample. For yeast it is recommended to dilute the sample between 10 and 1000 times by serial dilutions of factor 10, until the optimal count of between 1x10<sup>5</sup> cell/mL to 2x10<sup>6</sup> cell/mL is reached. The recommended serial dilutions of factor 10 may be achieved by adding 50 ul of supportion to 450 ul of Reagent Y100

factor 10 may be achieved by adding 50  $\mu$ l of suspension to 450  $\mu$ l of Reagent Y100.

**Procedure** Before use: Invert the Reagent Y100 container gently a few times after storage of more than a

month.

Place the container in the container holder (if such is used). Remove the cap of the container. Mount the optional liquid dispenser (Dispensette® III, Brand GmbH) on the container. Handle

the dispenser according to the instructions from the manufacturer.

The Lysis buffer is used in connection with the NucleoCounter® system, see package insert supplied with the NucleoCassettes™ or the NucleoCounter® YC-100™ user's guide for detailed

description of the procedure.

Stability For sealed containers refer to the expiry date on the label on the bottle.

After breaking the seal of the container the Reagent Y100 expires after 12 months (room temperature). During this period the cap must be mounted on the container while not in use. Alternatively the dispensing unit must be mounted on the container and operated at least once a week to prevent reagent crystallization. It is recommended that the dispenser be cleaned in

pure water before prolonged storage.

**Storage** Store the container with the Reagent Y100 at room temperature but never above 40°C.

Sediment can sometimes be seen if the Reagent Y100 is stored at low temperatures. This will dissolve when the temperature of the reagent rises and the Reagent can be used as normal.

Safety information Toxic to aquatic life with long lasting effects. Avoid release to the environment.

For detailed information please refer to Material Safety Data Sheet (MSDS), which is available

for download at <a href="http://chemometec.com/en-GB/Support/MSDS">http://chemometec.com/en-GB/Support/MSDS</a>

Contact with skin and eyes should be avoided. Exercise due care. Always wear suitable protective clothing when working with Reagent Y100. In case of contact with eyes, rinse

immediately with plenty of water and seek medical advice.

**Disposal of Waste** Avoid release to environment – toxic to aquatic life with long lasting effects.

Disposal of Reagent Y100 in accordance to national or local laws and regulations regarding the

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nature of the mixture it contains.

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