Electroporation system

The Eporator can be used as a fast, simple and safe way to transform bacteria, yeast and other microorganisms with DNA/RNA. Electroporation is claimed to yield significantly higher transformation efficiency, with highly reproducible results, compared with chemical methods.

Exposing bacteria or yeast strains to short, high-voltage electrical pulses enables macromolecules, such as plasmid DNA, to diffuse into the cell through temporary pores in the cell membrane. Designed to deliver ideal conditions for electroporation of bacteria and yeast, the instrument is claimed to give transformation efficiencies 10 times higher than with chemical transformation (heat shock method) and 50% higher than the earlier Electroporator 25102.

Two program buttons allow storage and recall of most commonly used parameters and simple one-button operation allows faster sample handling.

The instrument has a compact design for easy storage and transport and comes with a USB port facilitating export of data for analysis and GLP-compliant documentation.

Application protocols for the electroporation of various bacteria and yeast strains can be found at www.eppendorf.com/eporator.

Eppendorf South Pacific Pty Ltd

Contact info and more items like this at ***wf.net.au/D879***

Clean Kjeldahl analysis

Advances in technology are making Kjeldahl analysis safer and more efficient as users at the Viking Malt laboratory in Halmstad, Sweden, have discovered.

A Foss Kjeltec 8000 series instrument installed in 2009 is minimising the risk of chemical contact during the Kjeldahl analysis used for testing protein content of malt and wort. In particular, the handling of glass tubes full of hot chemicals is avoided. "Because the machine empties every tube automatically, you don't have any risk carrying the tubes," said laboratory operator and Kjeltec super-user AnnaStina Enell. "Just moving tubes full of hot chemicals from one side of the room to the other - it says by itself that it is dangerous."

Laboratory Manager Lisa Johansson spent a long time deciding whether to go for the manual or automatic titration model of the Kjeltec 8000 series instrument. "We discussed it a lot because the automated model is quite a lot more money," she said. But safer Kjeldahl testing was an important goal. "It is the most dangerous analysis we have in the lab. I can feel as safe as I can for the operators," she said.

The decision to go with the new Kjeltec appears to be paying off. In addition to improved safety, the new technology is leading to improved reliability of results and faster throughput of samples. The instrument is expected to pay for itself within two years.

Foss Pacific Pty Ltd

Contact info and more items like this at ***wf.net.au/D256***

Polycarbonate safety box

The Kartell hermetically sealed Safety Box (Art. 569) is a closed system designed to protect users during transportation or elimination of potentially biological hazardous material. The box is 330 x 175 x 180 mm and for extra stability Kartell's Test-Tube Racks (Art. 563, 564, 565, 566, 567 and 568) can be carried inside the box to hold potentially infected substances stored in test tubes or other similar containers.

The Safety Box has an optional accessory available which is a specific inner steel separator for transportation of urine and/or faeces containers.

The Safety Box Rack is designed for 10 urine containers up to 200 mL and three stool containers 30 mL in size. This accessory can be ordered under (Art.570).

The polycarbonate Safety Box is completely autoclavable, transparent and virtually unbreakable. It has a silicone gasket and four closing hooks giving an airtight seal, along with a stainless steel handle for transportation equipped with a non-swinging device and user sheet with instructions approved by the World Health Organisation. The Safety Box also displays the Bio-Hazard symbol.

Sieper & Co Pty Ltd

Contact info and more items like this at ***wf.net.au/E172***