

## easySpiral Dilute® Automatic diluter and plater

Ref 414 000



Standards:



Traceability:



Manufactured under:



Products made for INTERSCIENCE by Interlab, an ISO 9001 certified company

easySpiral Dilute® is an automatic diluter and plater. It enables serial dilutions up to  $10^{-5}$  with increased accuracy and automatic standardized plating from 30 to  $1 \times 10^{12}$  CFU /mL on 1 single Petri dish.

### TECHNICAL SPECIFICATIONS

- Plating modes: exponential, constant, **circle**, **pour plate**
- Petri dish diameter: 55 mm, 90 mm and 150 mm
- Can adapt to all sizes of Petri dishes with adjustable plating dish (**Ref 413 019** and **Ref 413 020**)
- Preset dispensed volumes: 50, 100 and 200  $\mu$ L
- Counting range: from 30 to  $1 \times 10^{12}$  UFC/mL
- **Programmable dispensed volume (via USB) from 10 to 1000  $\mu$ L**
- Exponential mode: 4 dilution logs on a  $\varnothing$  90 mm Petri dish / 6 dilution logs on a  $\varnothing$  140/150 mm Petri dish
- Volumes accuracy:  $\pm$  0.5% (in normal mode)
- **Syringe capacity: 1 000  $\mu$ L**
- **Plating cycles time:**
  - 1 disinfection + 5 dilutions + 1 sample intake + 1 plating of a dilution: 134 s
  - 1 disinfection + 5 dilutions + 1 sample intake + 1 plating of each dilution: 234 s
- **Automatic cycle of 5 successive dilutions at  $1/10^{\text{th}}$**
- **3 dilutions on a 90 mm Petri dish / 6 dilutions on a 150 mm Petri dish**
- **Successive plating capacity with the same sample : 20 Petri dishes (50  $\mu$ L)**
- **Multi-use, autoclavable stylus**
- **Stylus disinfection system by overflow patented system, until 8 bars pressure**
- Disinfection process
- Approved disinfectants: bleach at 1 to 2 % active chlorine or ethanol at 70 %
- **Security detection in case of absence of disinfection liquid**
- Approved diluents: saline water, Ringer solution
- **Autonomy in disinfection (in normal mode): 1000 cycles (2L bottles)**
- **Autonomy in diluents: 63 cycles (2L bottle)**
- **Stainless steel**
- Controlled by microprocessor
- **Fast rotating arm (Patented)**
- **Filling time (for different sample viscosities) and volume programmable by USB**
- **Sample Mixing before dilution/plating**
- 3 test keys for checking dilutions' volumes and platings (volumetric weighing)
- Easy connexion to PC via USB
- Traceability: to Excel™ export
- LIMS connection
- **Compatible with dataLink™ traceability system (sticker edition and automatic link with Scan® automatic colony counters)**
- Sample intake in Eppendorf™ 1.5 mL beaker

- Voltage and frequency: 100-240V~ 50-60Hz
- Fuses: 1.6A T 240V 5x20 mm
- Max power: 45 W
  
- Dimensions (w x d x h): 40 x 41.5 x 29 cm, weight: 16.4 kg
- Box (w x d x h): 60 x 50 x 55 cm, weight: 24.6 kg
  
- Warranty: 1 year
  
- In compliance with ISO 7218, ISO 4833-2, FDA BAM (Bacteriological Analytical Manual), AOAC 977.27
- Manufactured under CE, ROHS, WEEE - Products made for INTERSCIENCE by Interlab, an ISO 9001 certified company
- Designed and made in France

## DELIVERED WITH

- 1 plating ring for Ø 90 mm Petri dishes (by default on the unit)
- 1 box with:
  - 1 blue dye for testing (**Ref 415 530**)
  - 1 syringe with silicone tubing
  - 1 plating ring for Ø 55 mm Petri dishes
  - 1 plating ring for Ø 150 mm Petri dishes
  - 1 **Spiral**® counting grid for Ø 90 mm Petri dishes (**Ref 413 014**)
  - 1 Circle mode counting grid for Ø 90 mm Petri dish (**Ref 413 026**)
  - 1 set of 2 filters (**Ref 413 009**)
  - 1 software (minimum requirements: screen resolution of 1280x960)
  - 1 USB cable A/B
- 1 **Spiral**® counting grid for Ø 150 mm Petri dishes (**Ref 413 015**)
- 1 Circle mode counting grid for Ø 150 mm Petri dish (**Ref 413 027**)
- 1000 **Spiral**® DB50 beakers (**Ref 415 100**)
- 1 **EnzyClear**® liquid detergent (**Ref 413 029**)
- 4 single sets of GL45 bottles connectors (**Ref 413 003**)
- 1 double set of GL45 bottles connectors (**Ref 414 004**)
- 1 stylus (**Ref 414 001**)
- 1 power cable
- 1 user manual
- 1 **EnzyClear**® quick user guide

## OPTIONS / ACCESSORIES

- **Ref 410 100** DataLink™: Traceability system
- **Ref 410 120** Sticker for printer: Labels roll for thermal printer - Label size: 45 x 10 mm
- **Ref 410 130** Film: Thermal transfer film
- **Ref 413 001** Housing protection for platers: Transparent housing for working outside laminar flow
- **Ref 413 002** 2 L bottle (GL45): 2 L GL45 glass bottle
- **Ref 413 003** Connection kit for GL45 bottle: Autoclavable connection set for GL45 bottle
- **Ref 413 004** Syringe 1 mL: Syringe (capacity 1000 µL)
- **Ref 413 005** Micro pump: Internal micro pump
- **Ref 413 006** Tubings: Silicone tubing with filter for cleaning pump
- **Ref 413 014** **Spiral**® counting grid (90 mm): Counting grid for Ø 90 mm Petri dishes
- **Ref 413 015** **Spiral**® counting grid (150 mm): Counting grid for Ø 150 mm Petri dishes
- **Ref 413 019** Adjustable plate for Petri dish (90-150 mm): Multiadaptable support for Petri dishes of 90 to 150 mm
- **Ref 413 020** Plate for Petri dish (50-65 mm): Multiadaptable support for Petri dishes of 55 to 65 mm
- **Ref 413 026** Circle counting grid (90 mm): Circle mode counting grid for Ø 90 mm Petri dish
- **Ref 413 027** Circle counting grid (150 mm): Circle mode counting grid for Ø 150 mm Petri dish
- **Ref 413 029** **EnzyClear**®: **Spiral**® plater detergent recommended for cleaning and pre-disinfection
- **Ref 414 001** Stylus (1 mL): Stylus 1 mL
- **Ref 414 002** Support for Eppendorf™ 1.5 mL: Support of Eppendorf™ sample intake 1.5 mL for easy**Spiral** Dilute®
- **Ref 414 003** Maintenance kit for platers (1 mL): Maintenance kit (1 stylus + 1 syringe + 1 silicone tubings set, 1 grease tube, 8 filters for pump, 2 quick connectors)
- **Ref 414 004** Double connection kit for GL45 bottle: Double connection kit for GL45 bottle to be use on the same bottle
- **Ref 415 100** DB50 beakers: 1 000 sterile beakers for **Spiral**® plater (5 mL)
- **Ref 415 530** Blue dye for platers: Color dye for **Spiral**® tests (125 mL)
- **Ref 513 023** PTFE filters 0.2 µm (Ø 25 mm): Set of 5 autoclavable filters (0.2 µm)
- **Ref 522 000** Bar-code reader: Bar-code reader