

## easySpiral Dilute®

Automatic diluter and plater

Ref 414 000



Standards:



Traceability:



Manufactured under:



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

- All stainless steel
- Controlled by microprocessor
- Fast rotating arm (Patented)
- Multi-use, autoclavable stylus
- 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)
- Filling time (for different sample viscosities) and volume programmable by USB
- 3 test keys for checking dilutions' volumes and platings (volumetric weighing)
- Disinfection process
- Sample mixing before dilution/plating
  
- Counting range: from 30 to  $1 \times 10^{12}$  CFU/mL
- Preset dispensed volumes: 50, 100 and 200  $\mu$ L
- Volumes accuracy:  $\pm 0.5\%$  (in normal mode)
- Programmable dispensed volume (via USB) from 10 to 1000  $\mu$ L
- 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  $1/10^{\text{th}}$
- Exponential mode: 4 dilution logs on a  $\varnothing$  90 mm Petri dish / 6 dilution logs on a  $\varnothing$  140/150 mm Petri dish
- Circle mode: 3 dilutions on a 90 mm Petri dish / 6 dilutions on a 150 mm Petri dish
- Successive plating capacity with the same sample: up to 20 Petri dishes (50  $\mu$ L)
- Sample intake in Eppendorf™ 1.5 mL beaker
- Approved diluents: saline water, Ringer solution
- Autonomy in diluents: 63 cycles (2L bottle)
  
- Cleaning and disinfection of the stylus by “overflow” technology. Pression: up to 8 bars (patented)
- Approved disinfectants: bleach 1 % active chlorine or ethanol at 70 % or a solution of hydrogen peroxide  $\text{H}_2\text{O}_2$  (1 to 5 %) and peracetic acid PAA (0.05 to 1 %)
- Security detection in case of absence of disinfection liquid
- Autonomy in disinfection (in normal mode): 1000 cycles (2L bottles)

- Easy connection to PC via USB
- Traceability: Excel™ export, LIMS
- Compatible with dataLink™ traceability system (sticker edition and automatic link with Scan® automatic colony counters)
  
- Voltage - frequencies: 100-240V ~ 50-60Hz
- Fuses: T1.6A L 250V 5x20 mm
- Power: 45 W
  
- International machine marking : IP10
- Dimensions (w x d x h): 39,4 x 42,1 x 28,9 cm, weight: 16.6 kg
- Box (w x d x h): 60 x 50 x 55 cm, weight: 26,7 kg
  
- Warranty: 1 year further to warranty card recording
- Availability of spare parts: 10 years
- In compliance with ISO 7218, ISO 4833-2, FDA BAM (Bacteriological Analytical Manual), AOAC 977.27
- Manufactured under CE, UKCA, RoHS, WEEE
- Designed and made in France

## DELIVERED WITH

- 1 turntable 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 DB50 beakers (Ref 415 100)
- 1 EnzyClear® liquid detergent (Ref 413 029)
- 4 connection kits for GL45 bottle (Ref 413 003)
- 1 double kit for GL45 bottles (Ref 414 004)
- 1 stylus (Ref 414 001)
- 1 power cable
- 1 user's 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 for printer: Thermal transfer film
- Ref 412 010 Plate for Petri dish (50-60 mm): Multiadaptable support for Petri dishes from ø 50 to 60 mm
- Ref 412 011 Plate for Petri dish (60-70 mm): Multiadaptable support for Petri dishes from ø 60 to 70 mm
- Ref 412 012 Plate for Petri dish (70-80 mm): Multiadaptable support for Petri dishes from ø 70 to 80 mm
- Ref 412 013 Plate for Petri dish (80-90 mm): Multiadaptable support for Petri dishes from ø 80 to 90 mm
- 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 413 014 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 413 026 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 for Eppendorf™ - Sample intake 1.5 mL for easySpiral Dilute®
- Ref 414 003 Maintenance kit for platers (1 mL): Maintenance kit (1 stylus + 1 syringe + 1 x tubings (Ref 413 006), 1 grease tube, 10 filters for pump, 2 female quick connectors) on the same bottle
- Ref 415 100 Beakers (DB50): 1 000 beakers for Spiral® plater (5 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

## TUBINGS

- Ref 413 006 Tubings: Silicone tubing with filter for cleaning pump
- Ref 413 009 Filters for rinsing bath: Set of 2 filters for rinsing bath
- Ref 413 028 Tube weights (ø 3 mm): Set of 5 tube weights (inner ø 3 mm)
- Ref 414 004 Double connection kit for GL45 bottle: Double connection kit for GL45 bottle to be use
- Ref 415 530 Blue dye for platers: Color dye for Spiral® tests (125 mL)