


# Eco Dosimat

Your key to higher productivity and better reliability

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YOU
CAN
TRUST

**Metrohm means … Spectroscopy!**

Metrohm

# Liquid handling and manual titration fast, simple, and precise

Have you ever thought about how much time your employees spend every day preparing standard solutions, dosing precise volumes of liquids for sample preparation, and performing manual titrations? A lot of this time could be used much more productively, after all, it is only the analytical results that matter.

Now there is a dedicated tool that frees your employees' time, increasing their productivity and safety as well as the reliability of analytical results: The new Eco Dosimat.

**A true all-rounder**
The Eco Dosimat combines a digital buret, an integral magnetic stirrer, a touch sensitive display, and GLP compliant documentation of your dosing or titration applications – all in one device. With the Eco Dosimat you can...

- quickly and reliably **perform manual titrations**
- simply **prepare standard solutions** of any defined concentration
- **reliably dose precise volumes of liquids** for sample preparation or for syntheses and other chemical reactions

**InstantUp**
With this function, you can put your Eco Dosimat into a sleep mode (system off) when you are not using it. It is immediately ready for use again without you having to restart it.

## SWISS QUALITY AND GLOBAL SERVICE FROM THE WORLD'S No. 1 IN TITRATION

The Eco Dosimat is manufactured in Switzerland. However, it sells at a price you simply would not expect from a premium Swiss brand. We offer you a total solution that starts with an on-site installation of your instrument and includes our trusted service and application support – throughout the lifetime of your instrument!

Metrohm Swiss Quality

Metrohm Quality Service®

## BENEFITS THAT MAKE A REAL DIFFERENCE

Compared to liquid handling and manual titrations with glass pipets and burets, the Eco Dosimat gives you so much more:

- **No longer waste time** on the preparation and cleaning of glass pipets and burets before and after each titration. With the Eco Dosimat you are always ready to start!
- **Dose liquids with utmost precision down to µL-levels** (complying with DIN EN ISO 8655-6)




- **Read the exact dosing volume right from the Eco Dosimat's display** instead from a glass buret.
- **Print out GMP-compliant results** including date, time, and information about the titrant – at the push of a button.
- **Safe and store your most frequently used methods** and calculation formulas and have them ready for reuse whenever you need.
- **Manage access to methods and system configuration** (Routine and Expert mode)

# Liquid handling with the Eco Dosimat – precise dosing at the push of a button

1

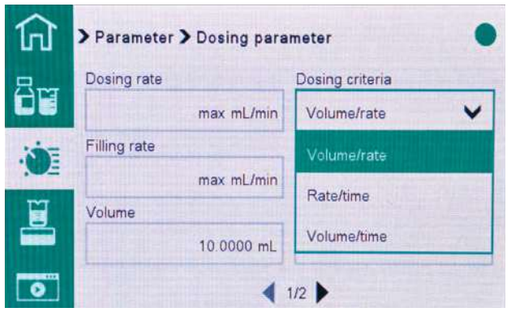
## STRAIGHTFORWARD DOSING OF ANY VOLUME DOWN TO µL-LEVELS

No longer waste time looking for the right pipet and forget dosing by hand: With the electronic buret of the Eco Dosimat you can dose any volume with µL-precision – at the push of a button (DOS Mode).

- Dosing of fixed volumes: Simply enter the equired volume on the Eco Dosimat's touch display and start.
- Free dosing: Simply keep pushing the button of the Eco Dosimat's Manual Dosing Controller to precisely control the dosing rate in the µL-range.




2




## CONVENIENT CONTROLLING OF SYNTHESES AND OTHER CHEMICAL REACTIONS

The XDOS (Extended Dosing) Mode offers you several dosing options, depending on your application. When using a second Eco Dosimat, you can even work in the tandem mode dosing without interruption.

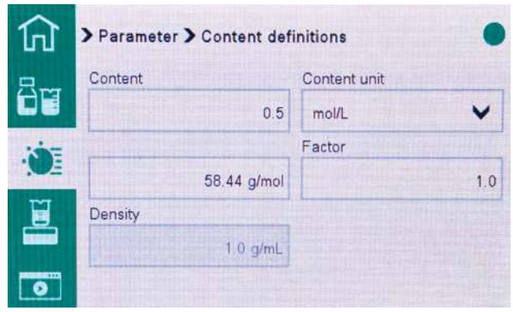
- Dosing of a fixed volume at a defined dosing rate
- Dosing of a fixed volume within a defined time period
- Dosing at a constant dosing rate and over a defined dosing time



3

## STRAIGHTFORWARD PREPARATION OF STANDARD SOLUTIONS

The «CNT D» Mode (Content Dosing) is the fastest and most convenient way to prepare a standard solution of a defined concentration – without using a volumetric flask and without weighing the exact amount of sample. Simply enter the required target concentration and the actual weight of the sample, and the Eco Dosimat will automatically calculate and then add the required solvent volume – at the push of a button.




| Target concentration in mol/L | Required approximate weight in g | Actual weigt from balance in g | Volume to be dosed in mL |
|---|---|---|---|
| 0.100 | 0.5 | 0.5211 | 89.1683 |
| 0.250 | 1.4 | 1.3743 | 94.0657 |
| 0.500 | 2.5 | 2.5324 | 86.6667 |
| 0.750 | 4.2 | 4.1123 | 93.8239 |
| 1.000 | 5.0 | 5.1319 | 87.8149 |

Example for the preparation of various standard solutions of NaCl (M = 58,44 g/mol, approx. volume = 100 mL)

4




## SAVING OF DEDICATED METHODS AND GLP COMPLIANT DOCUMENTATION

Stop wasting time on manual documentation: For each of the above mentioned applications, the Eco Dosimat generates a complete report with date and time stamp, which can then be saved on an USB memory stick or printed out on a printer.

# Manual titration – straightforward, precise, and with complete documentation

### TITRATION AT THE PUSH OF A BUTTON – NEVER OVERSHOOT THE ENDPOINT AGAIN!

The Manual Dosing Controller of the Eco Dosimat together with the function «Dosing Ramp» gives you perfect control of the titration rate. Simply keep pushing the control button to accelerate the titration rate. When you are working in the µL-range and you are approaching the endpoint, simply reduce the titration rate by sending ever shorter impulses via the control button.

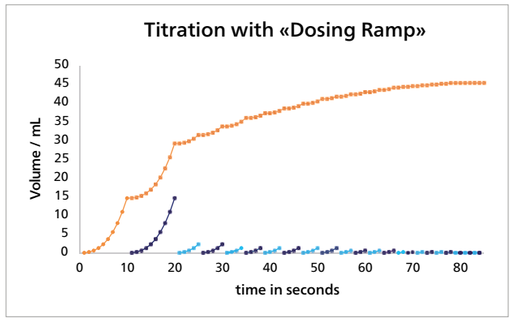



Diagram: Titration using the «Dosing Ramp»: Keeping the control button pushed longer accelerates the dosing rate, shorter impulses trigger increments in the µL-range.







# Benefits of manual titration with the Eco Dosimat

- Start your titration away – no preparation of glass pipets and burets
- At the end of the titration, the glass cylinder is automatically refilled
- Saving and monitoring of the concentration and the titer of the titrant
- Integral magnetic stirrer – no extra costs
- Titration methods and calculation formulas are saved on the instrument
- Routine and expert mode (managed access to methods and system configuration)
- Dosing volume at the endpoint is shown on the display, no reading from glass burets
- Report generation for results with time and date stamp as well as information on the titrant and calculations

## ORDERING INFORMATION

| | |
|---|---|
| **Instrument** | |
| 2.1007.0010 | Eco Dosimat |
| **Acessories** | |
| 6.03002.150 | Cylinder unit Eco 5 mL |
| 6.03002.210 | Cylinder unit Eco 10 mL |
| 6.03002.220 | Cylinder unit Eco 20 mL |
| 6.03002.250 | Cylinder unit Eco 50 mL |
| 2.142.0100 | Custom Q3X thermal printer |
| 2.143.0200 | TX-900MH impact printer |




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