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The Photometry Dictionary

TIPS AND TRICKS FOR PHOTOMETRIC MEASUREMENTS -
FROM OUR CUSTOMERS MAGAZINE

WATERWORLD

Pipette is not equal to pipette!

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Pipetting along with sample preparation, is an important factor for the quality of the measuring results. And this can be very expensive if the measuring values yielded by pipettes are continuously and constantly incorrect!

Now you may ask yourself what could be wrong with this:
A lot!

An error that is often quickly noticed would be a strong deviation in the pipette volume, e.g. if a pipette with variable volume was set incorrectly. As you usually know the expected measuring results quite well, you will be alerted immediately.

But it is more difficult to notice a handling error.

And if you are thinking that this cannot possibly happen: yes it can! This has probably happened to most of us at one time or another - at the latest when you start using a new pipette, you will notice how different it is: for example with the pressure point for the aspiration and expelling of the liquid. You will aspirate too much or too little or you will not push the entire volume into the test set. If you then aspirate too fast into the (different) tips, an air bubble might be added from time to time. And you will receive dispersed and incorrect measuring results.

How can you avoid this?

- With the correct quality control: If you own an analysis scale, you will pipette the appropriate volume of water into a beaker as usual: The scale will then show the weight in g (1 ml = 1,000 g). This test is device-independent and therefore works for every photometric system.
- More convenient for the photoLab® series: the Pipe-Check (part no. 250 498). The PipeCheck is a test solution for volumes of 2.0, 3.0, 5.0 and 10.0 ml. It is diluted with distilled water and measured photometrically. If the tolerance is exceeded, there will be a warning alert by the photoLab® devices as an AQS support.

And: Take your time to „practice“ with your new pipette.

