

Assess your Titration Application with Measurement Uncertainty Calculation



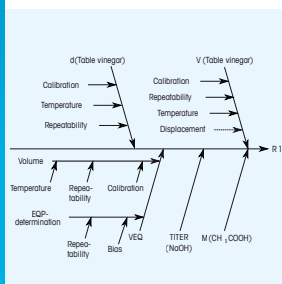
Prove result reliability

Many important decisions are based on the results of chemical analyses. It is therefore crucial to document the quality of the analytical results by providing a quantitative value for their trustworthiness and reliability. GTP MuPac is based on a widely accepted tool for this purpose: the measurement uncertainty.



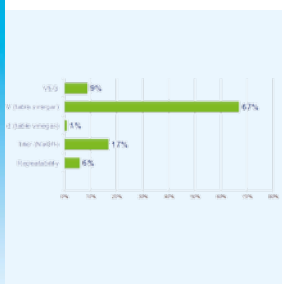
Ensure comparable results

Based on a method that is ideally validated, GTP MuPac provides a confidence interval of the respective titration result. This ensures and enables comparison with results that are achieved elsewhere with the same method and therefore ensures quality in different production or testing locations.



Comply with regulations

Laboratories that want to become or already are accredited according to ISO/IEC/EN 17025 (2005) must know how to calculate the measurement uncertainty. They must also have documented proof. GTP MuPac supports all relevant aspects to comply with these requirements.



Optimize your SOP

Measurement uncertainty calculations performed with the GTP MuPac yields a comprehensive quantitative assessment of all factors that influence your titration results. Based on the results, individual parameters can be precisely fine-tuned and your standard operating procedure optimized.



GTP® MuPac: Measurement Uncertainty for daily Good Titration Practice

Strictly speaking, the result of a chemical analysis is meaningless without an indication of the uncertainty involved in its measurement. In order to achieve analytical quality in the laboratory it is crucial to quantify the uncertainty. The Measurement Uncertainty Pac (MuPac), a Good Titration Practice (GTP) service of METTLER TOLEDO, delivers the measurement uncertainty of your titration application efficiently and securely. The calculation uses your application data and is performed remotely with a validated software. The results are included in a comprehensive report that you receive within one week. GTP MuPac can be applied to all known volumetric titration applications independent of the instrument used. With the GTP MuPac service you gain confidence to correctly assess and rely on your titration results. The provided documentation takes the worry out of future quality audits.

MuPac: Measurement Uncertainty Calculation of volumetric titration applications

4 easy steps to obtain a valuable quantitative assessment of your titration application

Step 1: Order the MuPac license key

The MuPac license key is required to access the GTP MuPac service that is based on a remote calculation of measurement uncertainty of your volumetric titration application. Please contact your local Mettler-Toledo organization or visit www.mt.com/gtp-mupac for details.

Step 2: Enter the MuPac license key at www.mt.com/gtp-mupac and download the calculation request form and literature

The MuPac license key enables a one-time download of a calculation request form and practice-oriented literature about the basics of Measurement Uncertainty Calculation in Titration. The self-explanatory calculation form is the essential part of the MuPac service. It can be used for one titration application and should be thoroughly completed for the calculation and the report. The accompanying literature will support you in this approach. If you require help, you may use E-Mail support from our support staff.

Step 3: Forward the completed request form for the remote calculation of the measurement uncertainty

Once you have completed the form, you are requested to email it to our support staff. Then the remote calculation of the measurement uncertainty of your titration will take place.

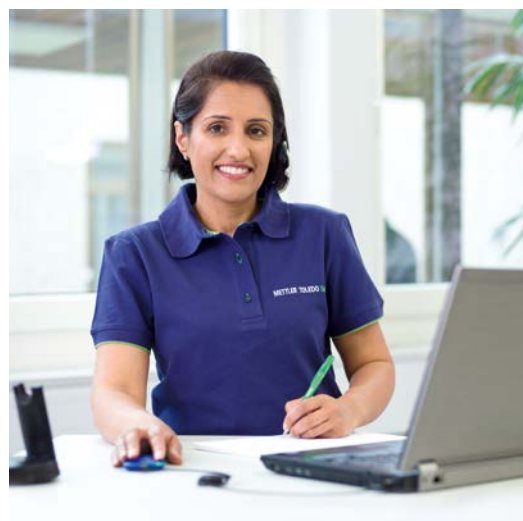
Step 4: Receive the measurement uncertainty for your titration application

Within one week you will receive a comprehensive report including:

- the measurement uncertainty of your titration application
- the confidence interval of your titration result
- the quantitative influence of the uncertainty sources within your titration application on the overall measurement uncertainty
- recommendations for optimization of your titration application

Industry examples

- Food & Beverage
- Pharmaceutical
- Medical
- Forensic
- Doping analysis



For the current titration service offering visit:
<http://www.mt.com/gtp>



Quality certificate ISO9001
Environment certificate ISO14001
Internet: <http://www.mt.com>
Worldwide service

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