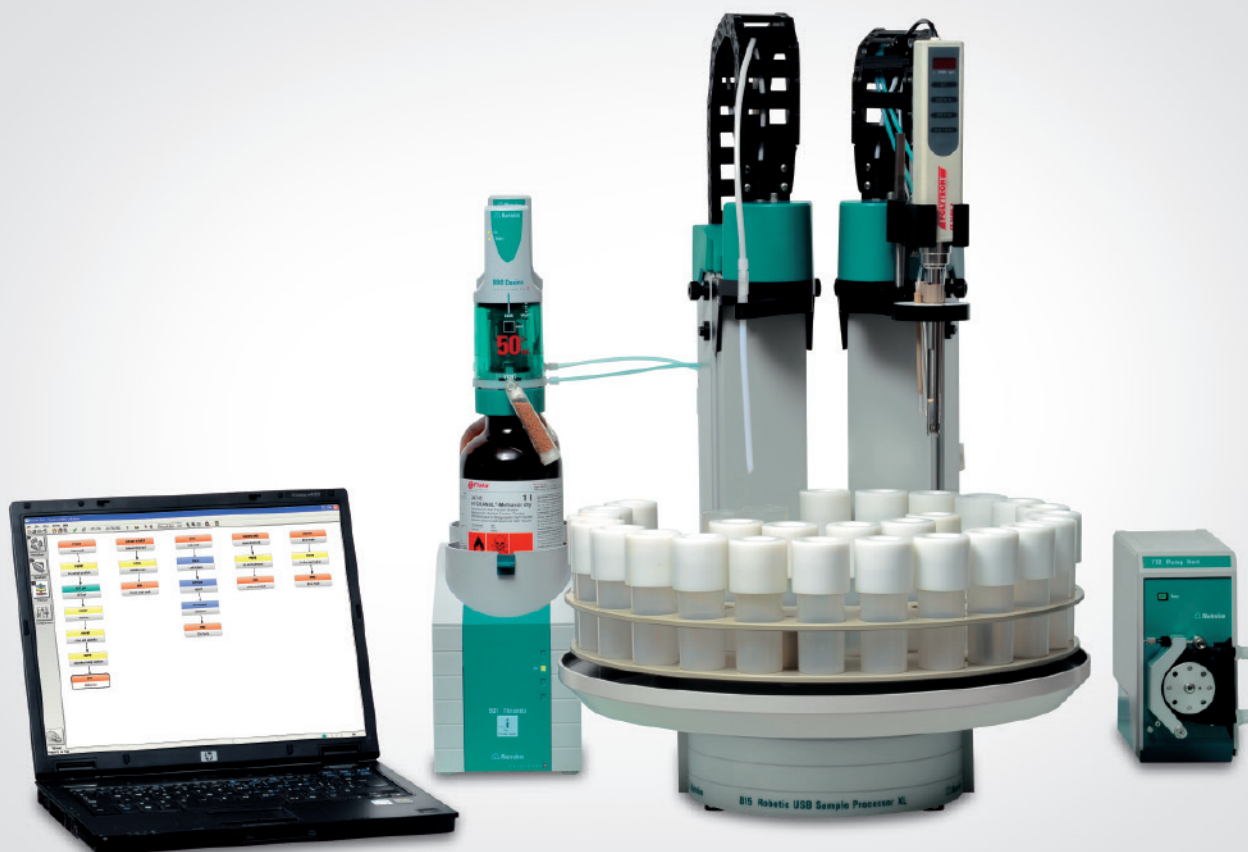


Water Content by Karl Fischer Titration with MATi 11



Complete system for fully automated, volumetric Karl Fischer titration including sample preparation

MATi 11 – fully automated water content determination for up to 53 samples

02

MATi 11 (MATi = **M**etrohm **A**utomated **T**itration) is a fully automated titration system for water content determination by volumetric Karl Fischer titration. The sample rack accommodates up to 53 titration beakers.

For solid, viscous, and liquid samples

The MATi 11 system comes with a homogenizer, thus making it especially suitable for water content determination in solid and viscous samples. The system can of course perform water content determinations in liquid samples, too.

Straightforward sample preparation

Sample preparation could not be easier! Weigh in the sample, seal the titration beaker, and place it on the sample rack – that's it!

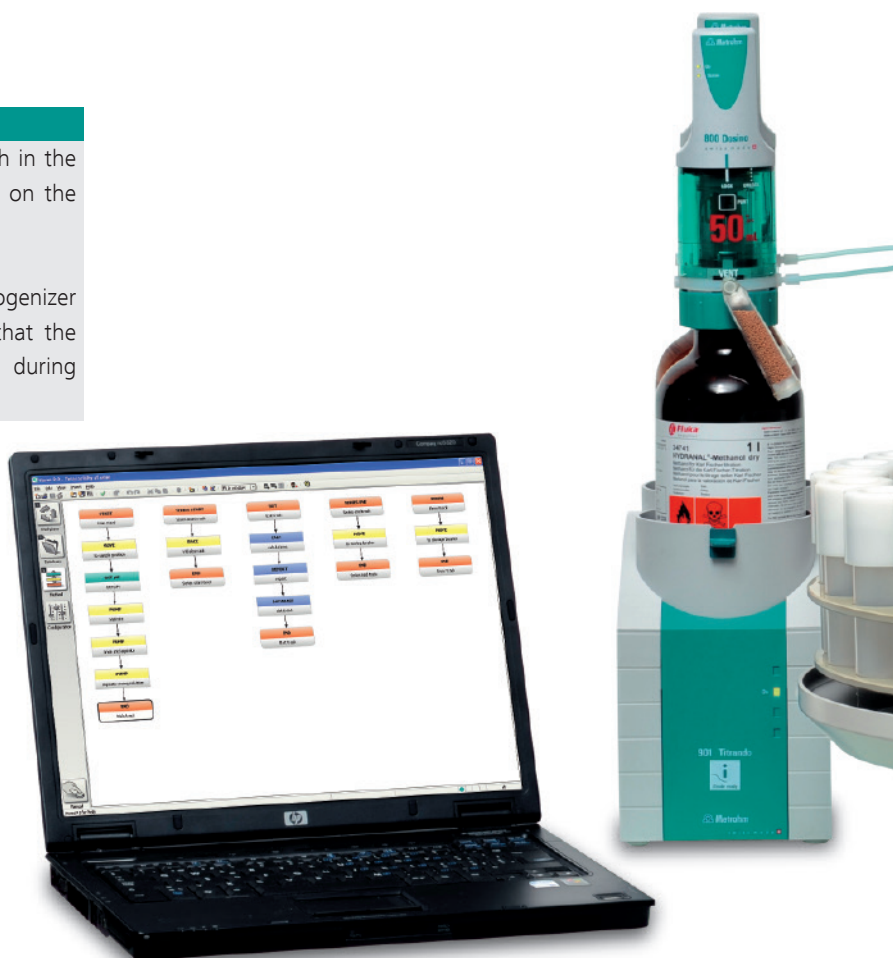
The samples are comminuted by the homogenizer directly in the titration beaker. This ensures that the water content of the sample is not altered during sample preparation.

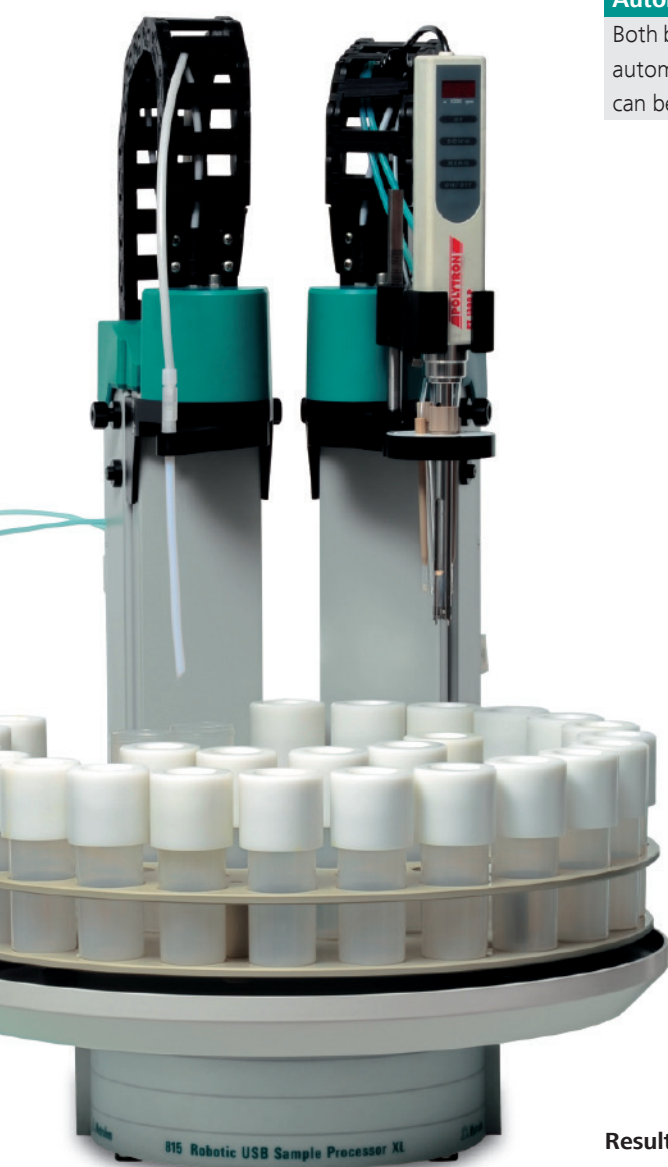
Effective homogenization of solid and viscous samples

The MATi 11 system comes with with a homogenizer. This comminutes solid samples without difficulty and accelerates the release of water. The homogenizer also enhances the mixing of viscous samples with the solvent.

Automated addition of solvent

The addition of solvent is performed automatically. This ensures that the same solvent volume is used for each titration – a must for blank value subtraction and an important factor for obtaining reproducible results.





Automated blank value and titer determination

Both blank value and titer determinations are performed automatically. Either a liquid or a solid water standard can be used for determining the titer.

Effective protection against moisture

If the entire sample rack is loaded with titration beakers, a certain amount of time may pass before the last determinations have been completed. The titration beakers are sealed with aluminum foil and foil holders to protect the samples from atmospheric moisture while waiting for the analysis to start.

System expansion is easy

The MATi 11 system can be expanded, for example with an additional 800 Dosino buret for the addition of solubility promoters such as formamide or chloroform, thus enabling ready analysis of samples that are insoluble in pure methanol.



Results

| Analgesic tablets [g] | Water content [%] |
|-----------------------|-------------------|
| 0.0523 | 1.54 |
| 0.0428 | 1.55 |
| 0.0532 | 1.52 |
| 0.0526 | 1.53 |
| 0.0849 | 1.54 |
| 0.0852 | 1.56 |
| Mean value | 1.54 |
| s(abs) | 0.014 |
| s(rel) | 0.91% |

Ordering information

MATi 11 – Automated volumetric KF titration including sample preparation

Optional accessories

- 6.1459.300 Sample beakers, PP, 120 mL, 250 pcs.
- 6.2820.000 Aluminum foil, Ø 88 mm, 1,000 sheets

www.metrohm.com

