

# Water Content by Karl Fischer Titration with MATi 10



Complete system for fully automated,  
volumetric Karl Fischer titration

## MATi 10 – fully automated water content determination for up to 24 samples

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MATi 10 (MATi = **M**etrohm **A**utomated **T**itration) is a fully automated system for water content determination by volumetric Karl Fischer titration. The sample rack accommodates up to 24 sample vessels.

### Suitable for solid and liquid samples

The MATi 10 system is suitable for water content determination in both solid and liquid samples. The only prerequisite is that the samples must be completely soluble in methanol (or a suitable solubility promoter) so that the water they contain can be released and titrated.

### Straightforward sample preparation

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

### 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.

### Automated addition of solvent

To ensure that the same amount of solvent is used in each titration, the addition of solvent is also fully automated. When blank value subtraction is used maintaining a constant solvent volume is an important prerequisite for reproducible results.



### Protection against moisture for reliable analysis results

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

The system can be expanded at any time, e.g., with an additional 800 Dosino for adding solubility promoters such as formamide or chloroform, thus enabling ready analysis of samples that are insoluble in pure methanol.



### Results

Sodium acetate [g]	Water content [%]
0.0523	39.5
0.0428	39.8
0.0532	39.8
0.0526	40.0
0.0849	39.9
0.0852	39.9
<b>Mean value</b>	<b>39.8</b>
<b>s(abs)</b>	<b>0.18</b>
<b>s(rel)</b>	<b>0.45%</b>

# Ordering information

MATi 10 – Automated volumetric KF titration

## Optional accessories

- 6.1459.400 Sample beakers, 75 mL (144 pcs.)
- 6.2820.000 Aluminum foil, Ø 88 mm, 1,000 sheets

[www.metrohm.com](http://www.metrohm.com)

