



Item Number: 188052 Water standard 1%

Certified Reference Material for
Karl Fischer Titration 1 g \pm 10 mg
H₂O Aquastar®

The Aquastar® Water standard 1% is a liquid water standard based on 1-methoxy-2-propanol with a water content of 9900 ppm–10100 ppm. The batch-specific certificate of analysis states the exact value measured by direct coulometric titration of the respective batch.

The Aquastar® Water standard 1% is a Certified reference material for ensuring the accuracy of Karl Fischer equipment according to ISO 9001 chapter 7.1.5 “Monitoring and measuring resources” of coulometric Karl Fischer Titrators and checking measuring results according to European Pharmacopeia (Ph.Eur.) chapter 2.5.32 “Water Micro Determination”. It can also be used to standardise the titrant according to European Pharmacopeia (Ph.Eur.) chapter 2.5.12 “Water Semi-Micro Determination” and according to the United States Pharmacopeia <921> “Water Determination”.



Handling recommendations:

Coulometric Titration:

Titration parameters:

Titration: Default titration settings
(according to instrument manufacturer)

Stirring time: 10 seconds

Weigh in quantity: approx. 0.5–1 g

Procedure:

The titration medium (100 mL) is placed into the titration cell and titrated dry. The Aquastar® Water standard 0.01% is injected into the titration cell with a syringe (exact sample weight determination by weighing of syringe before and after injection) and the water determination is started.

Volumetric Titration:

Titration parameters:

Titration: Default titration settings
(according to instrument manufacturer)

Stirring time: 10 seconds

Weigh in quantity: approx. 1–2 g

Procedure:

The titration medium (50ml) is placed into the cell and titrated dry. The Aquastar® Water standard 1% is injected into the titration cell with a syringe (exact sample weight determination by weighing of syringe before and after injection) and the titration is started.

For titer determination the titration is repeated for 3–6 times, the mean value is calculated, and the relative standard deviation should be below 1%.

For checking the correctness of the titer determination, a different lot of Aquastar® Water standard 1% should be used as sample. The measured water content should be within the tolerance stated in the certificate of analysis of the standard.

To place an order or receive technical assistance

In the U.S. and Canada, call toll-free 1-800-645-5476

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