



1.88052 Water Standard 1 %, 1 g = 10 mg H₂O
Standard for volumetric Karl Fischer Titration
AquaStar[®]

Reference material for volumetric water determination acc. to Karl Fischer.

Manufacturer: Merck KGaA

Batch No.: **HC 002362**

For certification the water content was determined with the Karl Fischer method using a volumetric Titrator and a coulometer acc. to ISO 760:

Measurement value: **0,998 %** **(equivalent to 9,98 mg/g H₂O)**

Measurement uncertainty: **± 0.010 %** **(0.10 mg/g)**

(equivalent to the extended measuring uncertainty with $k = 2$ for 95 % probability)

Measured by means of a volumetric Karl Fischer Titrator and Karl Fischer Coulometer using a cell with diaphragm.

Water standard 1% is suited as reference material for checking the accuracy of Karl Fischer equipment acc. to ISO 9001 and for calibration (titer determination) of volumetric Karl Fischer Titrators. It can also be used to check measuring results.

Water standard 1%, Cat. No. 1.88052, Batch HC 002362, is directly traceable to standard reference material SRM 2890 from NIST.

NIST: National Institute of Standards and Technology, Gaithersburg, USA

Date of release: December 22, 2010

Expiration date: December 31, 2015

Instructions for use

- 1) Open ampoule (point of break marked)
- 2) Draw up solvent in a syringe (glass or plastic): first rinse 1-2 times with about 1 ml each, then draw up the entire ampoule contents in the syringe
- 3) Inject about 1-2 ml of standard into the titration cell and start titration (determine the exact sample weight by reweighing)
- 4) Repeat determination (contents sufficient for 3-4 determinations)

Important: Open the ampoule only directly prior to starting measurement.
(Solvent in the opened ampoule can absorb moisture and distort results)

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