

CERTIFICATE

Aqueous calibration solution

ASTASOL® TIOC1H

This Certificate is designed in accordance with ISO Guide 31

Category:

Certified reference material

Analyte:

C_{inorg} + C_{org} (TIC + TOC) 1:1

Product code:

TIOC1H

Starting primary compound and theirs purity:

Na₂CO₃ 99.99+; NaHCO₃ 99.99+; potassium hydrogenphthalate 99.95

Matrix:

Ultrapure demineralized water (resistivity $\geq 18 \text{ M}\Omega\cdot\text{cm}$, 0.22 μm filtered).

Certified value of concentration and its expanded uncertainty (k = 2) at 20 °C

1 000 $\pm$ 2 mg C/l

Specification:

Batch No.: 0029

The date of production: 08.01.2021

Shelf life: 2 years from the date of production

The date of first opening of the bottle:

Expiry date:.....12 months from the first opening of the bottle within shelf life period, which should be indicated on the label of the bottle as well.

Intended use:

Calibration solution for the determination of inorganic and organic carbon.

Characterization and traceability:

This CRM is certified on the basis of gravimetric preparation. This procedure also ensures a direct traceability to SI unit – kg.

Trace impurities in bottled solution:

Max. 0.1 mg/l (total)

Homogeneity and stability:

It has been demonstrated that this CRM is homogeneous and its stability is guaranteed during the whole shelf life provided the solution is kept under conditions presented below.

Storing and instruction for use:

This CRM must be stored in the original closed bottle between 2 – 10 °C (fridge). The producer guarantees a declared shelf life and expiration time provided the CRM is properly stored and professionally handled. The temperature of the solution must be 20 ± 0.5 °C before every use. It is necessary to indicate the expiration time on this certificate and on the label, which depends on the date of the first time the bottle was opened. After use, the bottle must be immediately tightly capped and sealing the screw cap with parafilm is recommended. It is not recommended to use the standard solution when the bottle contains less than 10 % of the solution. Therefore, in case of non-transparent bottle, it is important to indicate the amount of the solution used, e.g. on the label. Do not pipette from the bottle. Do not return removed aliquots to bottle.

Producer:

ANALYTIKA®, spol. s r.o.
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Quality management systems of company ANALYTIKA®, spol. s r.o.:

ČSN EN ISO 9001:2016

ČSN EN ISO/IEC 17025:2018

ČSN EN ISO 17034:2017

Manager of Department of RM:

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Date of the first issue of certificate: 08.01.2021

Revision of certificate:

Certificate revision date:

Version of certificate: 01