

CERTIFICATE

Aqueous calibration solution

ASTASOL® AN90081N

This Certificate is designed in accordance with ISO Guide 31

Category: Certified reference material

Analyte: Bismuth (Bi)

Product code: AN90081N

Starting primary compound and its purity: Bi 99.999%

Matrix:

5% HNO₃ (v/v), prepared from sub boil distilled HNO₃ (ANALPURE®) and ultrapure demineralized water (resistivity $\geq 18\text{M}\Omega\cdot\text{cm}$, 0.22 μm filtered)

Density and its expanded uncertainty (k = 2): $1.0271 \pm 0.0005 \text{ g/cm}^3$ (at 20 °C)

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

1 000 \pm 2 mg/l

974 \pm 3 mg/kg*

*Mass fraction in mg/kg is derived from density

Specification:

Batch No.: 9003

The date of production: 07.01.2022

Shelf life: 5 years from the date of production

The date of first opening of the aluminium bag:

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

immediately tightly capped, and it is recommended to put it back into the reclosable aluminium bag. 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.

Note:

Detailed information about the production, homogeneity, stability, coding, characterization and storing of this CRM are described in the document “Detailed information about the production of aqueous calibration solutions ASTASOL®” which is available for download on the website www.analytika.net.

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:

Ing. Daniela Weissnerová

Head of production department:

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Date of the first issue of certificate: 10.01.2022

Revision of certificate:

Certificate revision date:

Version of certificate: 01