

AA Certificate of Analysis

Atomika Labs Quality Product

Single-Element Atomic Absorption

Barium (Ba) – 1000 µg/mL

Matrix: 5% HNO₃

Product #: ATM-BAR-100

Lot #: 106161R-42

Element	Certified Concentration & Uncertainty
BA	1004 ± 4 µg/mL (w/v)

Intended Use: This solution is intended for use as a AA Standards for flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Flame atomic absorption is a very accurate quantitative technique, and also a good qualitative technique.

Certification & Traceability: This AA Standard (Atomic Absorption Standard) was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9% pure Barium Nitrate Ba(NO₃)₂ dissolved in high purity Nitric acid (HNO₃) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. All volumetric dilutions are performed in Class A calibrated glassware. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the AA standard's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original AA Standard or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: Instructions for Use: 12 months from opening

Jan De Bruyn, CEO

See Exp. On Bottle

Certified Date

Atomika waives all responsibility for any damages resulting from the usage and / or implementation of the products described herein.

