

# Certificate of Analysis

## Product Description:

Name: Bismuth Metallo-Organic Standard  
Part Number: BIOMS  
Lot Number: SAMPLE

Source Material:  
Material Purity:  
Matrix:

High Purity Metallo Organic  
99.5%  
Mineral Oil

## Certified Value:

<u>Element</u>	<u>(<math>\mu\text{g/g}</math>)</u>
Bi	1000 $\pm$ 10

The Certified value is based on gravimetric preparation. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor  $k$  is about 2.

## Preparation Information:

The highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines. This standard was prepared using methods developed at the National Institute of Standards and Technology for the preparation of SRM Spectrometric Standard Solutions.

## Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedural and measurement uncertainties.

- Analytical Balance Calibration:** All balances are calibrated weekly by in-house method using NBS weights Inventory No 20231A. The balances are calibrated yearly, and the calibration weights are checked biennially by a qualified metrology company with weights traceable to the primary standards developed by NIST.
- Volumetric Device Calibration:** The calibration of all volumetric vessels is checked using ASTM method E542.

## Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned glass amber bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

## Refer to Material Safety Datasheet (MSDS) for hazardous information.

## Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided.

**Preparation Date:** October 9, 2014

**Shipped Date:**

**Expiration Date:**

**Certificate Issue Date:** October 9, 2014



**Angel Sellers**  
**Quality Manager**

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