

Certificate of Analysis

Product Description:

Name: Trace Metals on Filter Media Blank
Part number: **QC-TMFM- Blank**
Lot number: **1504304**

Reference Values:

<u>Element</u>	<u>($\mu\text{g}/\text{filter}$)</u>	<u>Element</u>	<u>($\mu\text{g}/\text{filter}$)</u>	<u>Element</u>	<u>($\mu\text{g}/\text{filter}$)</u>	<u>Element</u>	<u>($\mu\text{g}/\text{filter}$)</u>
Al	<0.01	Cr	<0.01	Pb	<0.01	Tl	<0.01
As	<0.01	Co	<0.01	Mn	<0.01	U	<0.01
Ba	<0.01	Cu	<0.01	Ni	<0.01	V	<0.01
Be	<0.01	Fe	<0.1	Ag	<0.01	Zn	<0.01
Cd	<0.01						

Preparation Information:

This certified reference material has been prepared from high-purity reference materials that were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. The filter media is a mixed cellulose ester type that is 37 mm in diameter with a pore size of 0.8 μm . Each filter is spiked with a blank composite standard solution and is designed to be used as an analytical blank for Method 7300.

Test solution preparation: The entire filter must be dissolved prior to analysis. The filter is easily dissolved in 5 mL of 1:1 HNO_3 and diluted with 18 megaohm deionized water to the desired volume.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. Standard Weight and Analytical Balance

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. Volumetric Device

The calibration of volumetric vessels is checked annually using the NBS 602 method.

Packaging and Storage Conditions:

The set includes five blank filters placed between individual spacers and packaged in a plastic petri dish. To maintain the integrity of this product, the filters should be stored in the petri dish under normal laboratory conditions.

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

Expiration Information:

The filters are guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: February 12, 2015

Shipped Date:

Expiration Date:

Certificate Issue Date: February 12, 2015



**Angel Sellers
Quality Manager**

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