

AuAgBlank16

Product Information Sheet

(Formerly Certificate of Analysis)

Low Silver and Gold Blank Material

Product contains <0.001 ppm gold and <0.05 ppm silver

Prepared and Certified By

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Date of Certification

12th Aug 2025

Certificate Status

Version 1

Available Packaging

This reference material has been packed in sealed sachets contain 50.0g of product. Any remaining material in the sachets must be discarded.

Origin of Reference Material

A mixture of finely pulverized basalt obtained from areas where silver and gold have not previously been mined. The materials were processed using machinery that has not been used for the treatment of these ores. This reference material was produced under ISO 9001:2015 certified quality management systems.

Supplier of Reference Material

ROCKLABS
P O Box 18-142
Glen Innes, Auckland 1743
NEW ZEALAND
Email: sales@rocklabs.com
Website: www.rocklabs.com

Handling Instructions

Fine powders present potential hazards to both the eyes and lungs. The product contains crystalline quartz and therefore dust from it should not be inhaled. Therefore, it is recommended to take standard precautions, including the use of safety glasses and dust masks.

Intended Use

This RM is designed to assist laboratories in maintaining accuracy, verifying instrument performance, and ensuring reliable results over time. It supports quality control, method validation, and operator assessments, providing a trusted benchmark for consistent measurements.

Stability and Storage Instructions

The reference material (RM) must be stored in a clean and cool dry environment away from direct sunlight. This RM is highly stable and is certified at a concentration level that is at least double the highest value found in the analysed samples. Unopened, the reference material has a shelf life of ten years from the certification date. When exposed to the atmosphere, it remains stable, with weight changes under 0.1% at natural temperature and humidity extremes. Stability will be regularly assessed, and any observed changes will be promptly communicated to purchasers. The RM should remain unopened or be kept in sealed jars to maintain stability.

Single-use sachets

It is the user's responsibility to discard any un-used material in the sachets unless the sachet is promptly sealed. Adequate precautions must be taken to prevent airborne contamination and moisture from affecting the material.

Composition and Source

The material is finely pulverized basalt, previously analyzed and confirmed to contain low levels of silver and gold. The raw basalt was sourced from Pukekawa Quarry, located on the banks of Waikato River in South Auckland, North Island, New Zealand – an area with no silver or gold mining. The processing was conducted in a silver/gold-free environment, ensuring the purity of the reference material.

Packaging and Sampling Process

A total of 3723 sachets were filled with 50g of material. 23 sachets were selected at regular intervals from the packaging run and were submitted to an accredited laboratory that specializes in low-level analysis for silver and gold. The samples were analyzed by aqua regia digestion followed by ICP-MS for silver and enhanced ICP-MS for gold. The average of the 23 analyses for gold was 0.23 parts per billion of gold, with the highest value being 0.32 parts per billion gold.

Analysis Methods

- **Silver** was analyzed using a 0.5g sample size with an aqua regia digest followed by Inductively Coupled Plasma Mass Spectrometry (ICP-MS).
- **Gold** was analyzed using 25g aliquots with aqua regia/enhanced Mass Spectrometry (MS).

Certification and Concentration

The material is certified at concentrations at least double the highest value obtained in the analyses, thus certified as less than 0.001 ppm gold and less than 0.05 ppm silver. These values apply to the product in sachets that have the identification numbers **279 351**.

Minimum Sample Mass Recommendation

It is recommended to use a minimum sample size of 25g for gold analysis and 0.5g for silver analysis when utilizing this reference material. The stated approximate concentrations of gold and silver are only guaranteed if the minimum sample sizes are adhered to for both analytes.

Commutability

The measurements are based on pre-treatment (aqua-regia) of the samples, which simplifies them for accurate comparisons and measurements in various testing and measurement processes. This reference material is derived from natural materials, ensuring their behavior aligns closely with routine 'field' samples. The matrix characteristics of this RM are detailed in the '**Origin of Reference Material**' and '**Composition and Source**' sections. Determining the suitability of this product shall be the sole responsibility of the user.

Product Information Updates

If any updates or changes are made to this Product Information Sheet, purchasers will be notified, and the updated version will be available on our website.

Copies of the analytical report from the independent laboratory are available on request.

Certifying Officer

Sadaf Sadaf

12th Aug 2025

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