



Certificate of Analysis

Mercury Calibration Standard

Agilent Part Number: 8500-6941

Lot Number: 12-55HGY2

| Analyte | CAS# | Labeled Conc. | Measured Conc. | SRM | Start Mat'l Formula | Start Mat'l Purity |
|---------|-----------|---------------|----------------|-------|---------------------|--------------------|
| Hg | 7439-97-6 | 10.0 µg/mL | 10.0 µg/mL | 3133* | Hg | 99.99+ |

* - indicates NIST SRM

† - indicates CRM (when NIST SRM is not available)

Purity grades:

Starting Materials: Shown above

Matrix:

5% HNO₃: HNO₃ (CAS No. 7697-37-2) high purity grade

Traceability:

This standard has been produced gravimetrically and volumetrically using ISO 9001 quality procedures. Agilent ICP / ICP-MS Spectrometer was used to determine the concentration of the main elements via NIST SRMs shown above, as well as the impurities.

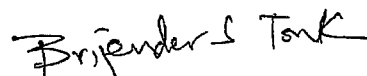
Trace Metallic Impurities in the Actual Solution, in µg/L, via Agilent ICP-MS Analysis, results are accurate to ±10%:

| Element | Conc. | Element | Conc. | Element | Conc. | Element | Conc. | Element | Conc. | Element | Conc. |
|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
| Ag | 0.3 | Cr | 0.1 | Ho | <0.01 | Nb | <0.03 | Ru | <0.01 | Th | <0.01 |
| Al | 10 | Cs | <0.02 | In | <0.03 | Nd | <0.02 | Sb | <0.03 | Ti | <0.2 |
| As | <1 | Cu | 0.2 | Ir | <0.08 | Ni | <0.2 | Sc | <0.2 | Tl | <0.1 |
| Au | <10 | Dy | <0.02 | K | 0.5 | P | <200 | Se | <4 | Tm | <0.01 |
| B | 2 | Er | <0.01 | La | <0.01 | Pb | 0.06 | Si | <50 | U | <0.01 |
| Ba | 0.04 | Eu | <0.01 | Li | <0.1 | Pd | <10 | Sm | <0.01 | V | <0.1 |
| Be | <0.03 | Fe | 1 | Lu | <0.01 | Pr | <0.01 | Sn | <0.05 | W | <0.09 |
| Bi | 0.03 | Ga | <0.1 | Mg | 0.3 | Pt | <0.07 | Sr | <0.08 | Y | <0.04 |
| Ca | 4 | Gd | <0.01 | Mn | <0.7 | Rb | <0.07 | Ta | <0.07 | Yb | <0.02 |
| Cd | <0.2 | Ge | 0.2 | Mo | <0.2 | Re | <0.06 | Tb | <0.01 | Zn | 1 |
| Ce | <0.02 | Hf | <0.01 | Na | 0.8 | Rh | <0.01 | Te | <0.06 | Zr | <0.05 |
| Co | <0.01 | | | | | | | | | | |

Balances are calibrated regularly with weight sets traceable to NIST.

Agilent reference standards are guaranteed stable and accurate to ±1% of measured analyte concentration. For these solutions we use the highest purity acids applicable, 18 megohm double deionized water and acid-leached, triple rinsed bottles. All glassware used is class A. This standard was manufactured following the guidelines set forth under ISO 17025 and ISO 17034 regulations.

Date of release: August 15, 2020
Date of expiration: February 28, 2022


QC Coordinator