



SPEXertificate®
Certificate of Reference Material



Catalog Number: PLIN2-2X

Lot No. 27-157INX

Description: 1000 µg/mL Indium

Matrix: 2% HNO₃

This **ASSURANCE**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1000 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3124a*

* - indicates NIST SRM

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

The CRM is prepared gravimetrically using high purity Indium Metal, Lot# 05201C. The certified value listed is the average of values obtained by classical wet assay and ICP spectrometer analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 1001 µg/mL

Method: Evaporate to dryness. Fume with Sulfuric Acid. Ignite and weigh as In₂O₃.

Instrumental Analysis by ICP Spectrometer: 999 µg/mL

Uncertified Properties

Density: 1.012 g/mL @ 20.0°C

Trace Metallic Impurities in the Actual Solution via ICP-MS Analysis:

Element	µg/mL	Element	µg/mL	Element	µg/mL	Element	µg/mL	Element	µg/mL	Element	µg/mL
Ag	<0.001	Cr	<0.001	Hg	<0.001	Nb	<0.001	Ru	<0.001	Th	<0.001
Al	0.001	Cs	<0.001	Ho	<0.001	Nd	<0.001	Sb	0.002	Ti	<0.001
As	<0.001	Cu	<0.001	Ir	<0.001	Ni	<0.001	Sc	<0.001	Tl	<0.001
Au	<0.001	Dy	<0.001	K	<0.06	P	<0.2	Se	<0.001	Tm	<0.001
B	<0.001	Er	<0.001	La	<0.001	Pb	0.003	Si	<0.1	U	<0.001
Ba	<0.001	Eu	<0.001	Li	<0.001	Pd	<0.001	Sm	<0.001	V	<0.001
Be	<0.001	Fe	<0.002	Lu	<0.001	Pr	<0.001	Sn	0.002	W	<0.001
Bi	0.005	Ga	<0.001	Mg	0.001	Pt	<0.001	Sr	<0.001	Y	<0.001
Ca	<0.009	Gd	<0.001	Mn	<0.001	Rb	<0.001	Ta	<0.001	Yb	<0.001
Cd	<0.001	Ge	<0.001	Mo	<0.001	Re	<0.001	Tb	<0.001	Zn	0.009
Ce	<0.001	Hf	<0.001	Na	0.003	Rh	<0.001	Te	<0.001	Zr	<0.001
Co	<0.001										

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: JAN -- 2025

Certifying Officer: Katherine Cullinan
Katherine Cullinan, QC Manager