

Certificate of Analysis

LabKings B.V.
Tappersweg 59
2031 ER Haarlem
The Netherlands

Catalog No.: LK1-00280503

Lot No.: 1083726

Storage: Ambient

Specific Gravity: Not Applicable

Matrix: 2% HNO₃

Description: Nickel 10 mg/L in 2% HNO₃, 500 mL

Date Received

Expiration Date 4-Jun-2017

Certification Date 2-Dec-2015

Element	Symbol	CAS No	Source Lot No	Purity %	Concentration mg/L
Nickel	Ni	7440-02-0	7021.46.9	99.995	10 +/- .03

This standard has been prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only Class-A volumetric glassware was used to prepare this product. The concentration and uncertainty of this standard are calculated based on the weight and volumes used in the manufacturing process. The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been certified by ICP against an independent source which is directly traceable to NIST SRM 3136. This standard was analyzed by ICP-MS for trace impurities. A = Major component, INT = Interferent from the major component.

Trace impurity analysis in µg/L

Li	<0.1	Ca	<1.0	Cu	<0.1	Y	<0.1	Cd	<0.1	Ce	<0.1	Ho	<0.1	Re	<0.1	Bi	<0.1
Be	<0.1	Ti	<0.1	Zn	<0.1	Zr	<0.1	In	<0.1	Pr	<0.1	Er	<0.1	Os	<0.1	Th	<0.1
B	<1.0	V	<0.1	Ga	<0.1	Nb	<0.1	Sn	<0.1	Nd	<0.1	Tm	<0.1	Ir	<0.1	U	<0.1
Na	<1.0	Cr	<0.1	Ge	<0.1	Mo	<0.1	Sb	<0.1	Sm	<0.1	Yb	<0.1	Pt	<0.1		
Mg	<1.0	Mn	<0.1	As	<0.1	Ru	<0.1	Te	<0.1	Eu	<0.1	Lu	<0.1	Au	<0.1		
Al	<1.0	Fe	<1.0	Se	<0.1	Rh	<0.1	Cs	<0.1	Gd	<0.1	Hf	<0.1	Hg	<0.1		
P	<1.0	Co	<0.1	Rb	<0.1	Pd	<0.1	Ba	<0.1	Tb	<0.1	Ta	<0.1	Tl	<0.1		
K	<1.0	Ni	A	Sr	<0.1	Ag	<0.1	La	<0.1	Dy	<0.1	W	<0.1	Pb	<0.1		

This standard was manufactured by a laboratory accredited to ISO/IEC 17025:2005 (certificate number 3031.01) by the American Association of Laboratory Accreditation (A2LA). The manufacturer's quality system is audited and registered by NSF-ISR to ISO 9001:2008 (certificate number IZ391-IS4).

Certified By: _____



Carrie Bibbins