

## Certificate of Analysis

Product Name:

**Nitric acid PurTrace for Trace Analysis**

Product No.: PSR44687  
Lot No.: Sample COA  
Brand: PureSynth  
CAS No.: 7697-37-2  
Molecular Formula: HNO<sub>3</sub>  
Molecular Weight: 63.01 g/mol  
Date of Mfg.: NA  
Date of Exp.: NA

Test	Specification	Result
Appearance	Colorless liquid	Conforms
Assay	67-69%	68.9 %
Silver (Ag)	NMT 0.1 ppb	<0.01 ppb
Aluminium (Al)	NMT 1.0 ppb	0.1 ppb
Arsenic (As)	NMT 0.5 ppb	<0.1 ppb
Gold (Au)	NMT 0.1 ppb	<0.01 ppb
Boron (B)	NMT 1.0 ppb	<0.6 ppb
Barium (Ba)	NMT 0.1 ppb	<0.01 ppb
Beryllium (Be)	NMT 0.1 ppb	<0.01 ppb
Bismuth (Bi)	NMT 0.1 ppb	<0.01 ppb
Calcium (Ca)	NMT 1.0 ppb	0.7 ppb
Cadmium (Cd)	NMT 0.5 ppb	<0.01 ppb
Cerium (Ce)	NMT 0.1 ppb	<0.01 ppb
Cobalt (Co)	NMT 0.5 ppb	<0.01 ppb
Chromium (Cr)	NMT 1.0 ppb	0.1 ppb
Cesium (Cs)	NMT 0.1 ppb	<0.01 ppb
Copper (Cu)	NMT 0.5 ppb	<0.02 ppb
Dysprosium (Dy)	NMT 0.1 ppb	<0.01 ppb
Erbium (Er)	NMT 0.1 ppb	<0.01 ppb
Europium (Eu)	NMT 0.1 ppb	<0.01 ppb
Iron (Fe)	NMT 1.0 ppb	0.3 ppb
Gallium (Ga)	NMT 0.1 ppb	<0.01 ppb
Gadolinium (Gd)	NMT 0.1 ppb	<0.01 ppb
Germanium (Ge)	NMT 0.1 ppb	<0.01 ppb
Hafnium (Hf)	NMT 0.1 ppb	<0.01 ppb
Mercury (Hg)	NMT 0.1 ppb	<0.1 ppb
Holmium (Ho)	NMT 0.1 ppb	<0.01 ppb

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For queries on this COA, please contact our technical team at [technical@pure-synth.com](mailto:technical@pure-synth.com)

Indium (In)	NMT 0.1 ppb	<0.01 ppb
Potassium (K)	NMT 1.0 ppb	0.6 ppb
Lanthanum (La)	NMT 0.1 ppb	<0.01 ppb
Lithium (Li)	NMT 0.1 ppb	<0.01 ppb
Lutetium (Lu)	NMT 0.1 ppb	<0.01 ppb
Magnesium (Mg)	NMT 1.0 ppb	0.3 ppb
Manganese (Mn)	NMT 0.1 ppb	<0.01 ppb
Molybdenum (Mo)	NMT 0.1 ppb	<0.01 ppb
Sodium (Na)	NMT 1.0 ppb	0.5 ppb
Niobium (Nb)	NMT 0.1 ppb	<0.01 ppb
Neodymium (Nd)	NMT 0.1 ppb	<0.01 ppb
Nickel (Ni)	NMT 0.5 ppb	<0.02 ppb
Lead (Pb)	NMT 1.0 ppb	<0.1 ppb
Palladium (Pd)	NMT 0.5 ppb	<0.02 ppb
Praseodymium (Pr)	NMT 0.1 ppb	<0.01 ppb
Platinum (Pt)	NMT 0.5 ppb	0.03 ppb
Rubidium (Rb)	NMT 0.1 ppb	<0.01 ppb
Rhenium (re)	NMT 0.1 ppb	<0.01 ppb
Rhodium (rh)	NMT 0.5 ppb	0.02 ppb
Ruthenium (Ru)	NMT 0.5 ppb	<0.01 ppb
Antimony (Sb)	NMT 0.5 ppb	<0.01 ppb
Scandium (Sc)	NMT 0.1 ppb	0.05 ppb
Selenium (Se)	NMT 1.0 ppb	<0.1 ppb
Samarium (Sm)	NMT 0.1 ppb	<0.01 ppb
Tin (Sn)	NMT 0.5 ppb	<0.02 ppb
Strontium (Sr)	NMT 0.1 ppb	<0.01 ppb
Terbium (Tb)	NMT 0.1 ppb	<0.01 ppb
Tellurium (Te)	NMT 0.1 ppb	<0.01 ppb
Thorium (Th)	NMT 0.1 ppb	<0.01 ppb
Titanium (Ti)	NMT 0.5 ppb	<0.01 ppb
Thallium (Tl)	NMT 0.1 ppb	<0.01 ppb
Thulium (Tm)	NMT 0.1 ppb	<0.01 ppb
Uran (U)	NMT 0.1 ppb	<0.01 ppb
Vanadium (V)	NMT 0.5 ppb	<0.01 ppb
Tungsten (W)	NMT 0.1 ppb	<0.01 ppb
Yttrium (Y)	NMT 0.1 ppb	<0.01 ppb
Ytterbium (Yb)	NMT 0.1 ppb	<0.01 ppb
Zinc (Zn)	NMT 0.5 ppb	0.07 ppb
Zirconium (Zr)	NMT 0.1 ppb	0.02 ppb
Chloride (Cl)	NMT 200.0 ppb	<100.0 ppb
Phosphate (PO <sub>4</sub> )	NMT 10.0 ppb	<5.0 ppb
Sulfate (SO <sub>4</sub> )	NMT 300.0 ppb	<150.0 ppb

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**Remarks:**

This is to certify that the mentioned batch has been analysed at the time of quality release and has been found to be in compliance with prescribed specifications

The current Specification sheet may be available at [www.pure-synth.com](http://www.pure-synth.com)

Inspect on receipt

**Storage Condition:**

Store at room temperature and keep the container tightly closed

PureSynth Research Chemicals GmbH

*This is electronically-generated copy & is valid without a signature*

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