

Certificate of Analysis

Product Name:

Hydrochloric acid PurTrace for Trace analysis, fuming, ≥37%

Product No.: PSR40528
Lot No.: Sample COA
Brand: PureSynth
CAS No.: 7647-01-0
Molecular Formula: HCl
Molecular Weight: 36.46 g/mol
Date of Mfg.: NA
Date of Exp.: NA

| Test | Specification | Result |
|------------------|-------------------------------|-------------------------|
| Assay | ≥ 37.0 % | 37.40 % |
| Density (D 20/4) | 1.175-1.188 g/cm ³ | 1.185 g/cm ³ |
| Aluminium (Al) | NMT 1.0 ppb | 0.08 ppb |
| Antimony (Sb) | NMT 0.5 ppb | 0.14 ppb |
| Arsenic (As) | NMT 0.5 ppb | 0.22 ppb |
| Barium (Ba) | NMT 0.1 ppb | 0.06 ppb |
| Beryllium (Be) | NMT 0.1 ppb | 0.05 ppb |
| Bismuth (Bi) | NMT 0.1 ppb | 0.04 ppb |
| Boron (B) | NMT 1.0 ppb | 0.19 ppb |
| Cadmium (Cd) | NMT 0.1 ppb | 0.08 ppb |
| Calcium (Ca) | NMT 1.0 ppb | 0.58 ppb |
| Cesium (Cs) | NMT 0.1 ppb | 0.06 ppb |
| Cerium (Ce) | NMT 0.1 ppb | 0.04 ppb |
| Chromium (Cr) | NMT 0.5 ppb | 0.17 ppb |
| Cobalt (Co) | NMT 0.1 ppb | 0.06 ppb |
| Copper (Cu) | NMT 0.5 ppb | 0.09 ppb |
| Dysprosium (Dy) | NMT 0.1 ppb | 0.08 ppb |
| Erbium (Er) | NMT 0.1 ppb | 0.07 ppb |
| Europium (Eu) | NMT 0.1 ppb | 0.05 ppb |
| Gadolinium (Gd) | NMT 0.1 ppb | 0.04 ppb |
| Gallium (Ga) | NMT 0.1 ppb | 0.05 ppb |
| Germanium (Ge) | NMT 0.1 ppb | 0.06 ppb |
| Gold (Au) | NMT 0.5 ppb | 0.44 ppb |
| Hafnium (Hf) | NMT 0.1 ppb | 0.07 ppb |
| Holmium (Ho) | NMT 0.1 ppb | 0.06 ppb |
| Indium (In) | NMT 0.1 ppb | 0.08 ppb |
| Iridium (Ir) | NMT 0.1 ppb | 0.08 ppb |

The Certificate of Analysis (COA) is valid only for the lot specified and within the product's shelf life. Retesting is recommended after the expiry date or if storage conditions are compromised. We guarantee a proper quality within our General Conditions of Sales. The conditions are subject to change without prior notice.
For queries on this COA, please contact our technical team at technical@pure-synth.com

| | | |
|----------------------------|--------------|-------------|
| Iron (Fe) | NMT 1 ppb | 0.43 ppb |
| Lanthanum (La) | NMT 0.1 ppb | 0.06 ppb |
| Lead (Pb) | NMT 0.1 ppb | 0.08 ppb |
| Lithium (Li) | NMT 0.1 ppb | 0.08 ppb |
| Lutetium (Lu) | NMT 0.1 ppb | 0.05 ppb |
| Magnesium (Mg) | NMT 0.5 ppb | 0.09 ppb |
| Manganese (Mn) | NMT 0.1 ppb | 0.08 ppb |
| Mercury (Hg) | NMT 0.1 ppb | 0.06 ppb |
| Molybdenum (Mo) | NMT 0.1 ppb | 0.05 ppb |
| Neodymium (Nd) | NMT 0.1 ppb | 0.06 ppb |
| Nickel (Ni) | NMT 0.5 ppb | 0.19 ppb |
| Niobium (Nb) | NMT 0.1 ppb | 0.04 ppb |
| Palladium (Pd) | NMT 0.5 ppb | 0.12 ppb |
| Platinum (Pt) | NMT 0.5 ppb | 0.12 ppb |
| Potassium (K) | NMT 1.0 ppb | 0.10 ppb |
| Praseodymium (Pr) | NMT 0.1 ppb | 0.08 ppb |
| Rhenium (Re) | NMT 0.1 ppb | 0.07 ppb |
| Rhodium (Rh) | NMT 0.1 ppb | 0.05 ppb |
| Rubidium (Rb) | NMT 0.1 ppb | 0.06 ppb |
| Ruthenium (Ru) | NMT 0.1 ppb | 0.02 ppb |
| Samarium (Sm) | NMT 0.1 ppb | 0.04 ppb |
| Scandium (Sc) | NMT 0.1 ppb | 0.08 ppb |
| Selenium (Se) | NMT 1.0 ppb | 0.12 ppb |
| Silver (Ag) | NMT 1.0 ppb | 0.11 ppb |
| Sodium (Na) | NMT 1.0 ppb | 0.20 ppb |
| Strontium (Sr) | NMT 0.1 ppb | 0.07 ppb |
| Tantalum (Ta) | NMT 0.1 ppb | 0.05 ppb |
| Tellurium (Te) | NMT 0.1 ppb | 0.09 ppb |
| Terbium (Tb) | NMT 0.1 ppb | 0.08 ppb |
| Thallium (Tl) | NMT 0.1 ppb | 0.08 ppb |
| Thulium (Tm) | NMT 0.1 ppb | 0.07 ppb |
| Tin (Sn) | NMT 0.5 ppb | 0.07 ppb |
| Titanium (Ti) | NMT 0.5 ppb | 0.07 ppb |
| Tungsten (W) | NMT 0.1 ppb | 0.08 ppb |
| Vanadium (V) | NMT 0.5 ppb | 0.06 ppb |
| Ytterbium (Yb) | NMT 0.1 ppb | 0.05 ppb |
| Yttrium (Y) | NMT 0.1 ppb | 0.08 ppb |
| Zinc (Zn) | NMT 1.0 ppb | 0.10 ppb |
| Zirconium (Zr) | NMT 0.1 ppb | 0.08 ppb |
| Chlorine - Cl ⁻ | NMT 2.0 ppm | Passes Test |
| Sulphate - SO ₄ | NMT 5.0 ppm | Passes Test |
| Phosphate - P | NMT 0.05 ppm | Passes Test |
| Sulphite | NMT 1.0 ppm | Passes Test |
| Ammonium - NH ₄ | NMT 3.0 ppm | Passes Test |

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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

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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