

Certificate of Analysis

1.00317.2500 Hydrochloric acid fuming 37% for analysis EMSURE® ACS,ISO,

Reag. Ph Eur

Batch

K49937317

| | Spec. Values | | Batch Values | | |
|------------------------------|--------------|-------|--------------|-------|--|
| Assay (alkalimetric) | 37.0 - 38.0 | % | 37.4 | % | |
| Identity | passes test | | passes test | | |
| Color | ≤ 10 | Hazen | < 10 | Hazen | |
| Appearance | passes test | | passes test | | |
| Appearance of solution | passes test | | passes test | | |
| Bromide (Br) | ≤ 50 | ppm | < 10 | ppm | |
| Free chlorine (CI) | ≤ 0.4 | ppm | < 0.4 | ppm | |
| Phosphate (PO ₄) | ≤ 0.5 | ppm | < 0.1 | ppm | |
| Sulfate (SO ₄) | ≤ 0.5 | ppm | < 0.5 | ppm | |
| Sulfite (SO ₃) | ≤ 0.5 | ppm | < 0.5 | ppm | |
| Heavy metals (as Pb) | ≤ 1 | ppm | < 1 | ppm | |
| Ag (Silver) | ≤ 0.020 | ppm | < 0.010 | ppm | |
| Al (Aluminium) | ≤ 0.050 | ppm | < 0.010 | ppm | |
| As (Arsenic) | ≤ 0.010 | ppm | < 0.010 | ppm | |
| Au (Gold) | ≤ 0.050 | ppm | < 0.010 | ppm | |
| B (Boron) | ≤ 0.100 | ppm | < 0.050 | ppm | |
| Ba (Barium) | ≤ 0.010 | ppm | < 0.010 | ppm | |
| Be (Beryllium) | ≤ 0.010 | ppm | < 0.010 | ppm | |
| Bi (Bismuth) | ≤ 0.050 | ppm | < 0.010 | ppm | |
| Ca (Calcium) | ≤ 0.300 | ppm | < 0.100 | ppm | |
| Cd (Cadmium) | ≤ 0.010 | ppm | < 0.005 | ppm | |
| Co (Cobalt) | ≤ 0.010 | ppm | < 0.005 | ppm | |
| Cr (Chromium) | ≤ 0.010 | ppm | < 0.005 | ppm | |
| Cu (Copper) | ≤ 0.010 | ppm | < 0.005 | ppm | |
| Fe (Iron) | ≤ 0.100 | ppm | < 0.050 | ppm | |
| Ga (Gallium) | ≤ 0.050 | ppm | < 0.010 | ppm | |
| Ge (Germanium) | ≤ 0.020 | ppm | < 0.020 | ppm | |
| Hg (Mercury) | ≤ 0.010 | ppm | < 0.010 | ppm | |
| K (Potassium) | ≤ 0.100 | ppm | < 0.050 | ppm | |
| Li (Lithium) | ≤ 0.010 | ppm | < 0.005 | ppm | |
| Mg (Magnesium) | ≤ 0.050 | ppm | < 0.010 | ppm | |
| Mn (Manganese) | ≤ 0.010 | ppm | < 0.010 | ppm | |
| Mo (Molybdenum) | ≤ 0.010 | ppm | < 0.010 | ppm | |
| NH ₄ (Ammonium) | ≤ 1 | ppm | < 1 | ppm | |
| Na (Sodium) | ≤ 0.300 | ppm | < 0.010 | ppm | |
| Ni (Nickel) | ≤ 0.020 | ppm | < 0.010 | ppm | |
| Pb (Lead) | ≤ 0.010 | ppm | < 0.005 | ppm | |
| Pt (Platinum) | ≤ 0.100 | ppm | < 0.050 | ppm | |
| Sn (Tin) | ≤ 0.050 | ppm | < 0.010 | ppm | |
| Sr (Strontium) | ≤ 0.010 | ppm | < 0.010 | ppm | |
| Ti (Titanium) | ≤ 0.020 | ppm | < 0.010 | ppm | |

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Reag. Ph Eur

Batch

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| | | | | 1 |
|---|---------|-----|---------|-----|
| TI (Thallium) | ≤ 0.020 | ppm | < 0.010 | ppm |
| V (Vanadium) | ≤ 0.010 | ppm | < 0.010 | ppm |
| Zn (Zinc) | ≤ 0.050 | ppm | 0.026 | ppm |
| Zr (Zirconium) | ≤ 0.020 | ppm | < 0.010 | ppm |
| Residue on ignition (as SO ₄) | ≤ 3 | ppm | < 2 | ppm |
| Non volatile matter | ≤ 10 | ppm | < 5 | ppm |
| | | | | |

Expiry date : see product label

Date of release (DD.MM.YYYY) 02.02.2018

Dr. Reiner Vogt

Responsible laboratory manager quality control

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