



Nitric Acid, 69.0-70.0%

BAKER INSTRA-ANALYZED[®] Reagent
For Trace Metal Analysis

Product No. 9598
 Lot No. H45031
 Release Date 11/05/2009

Certificate of Analysis

| TEST | SPECIFICATION | RESULT |
|-----------------------------------|---------------|-------------|
| Meets A.C.S. Specifications | | |
| Assay (HNO ₃) | 69.0 - 70.0 % | 69.3 % |
| Appearance | Passes Test | Passes Test |
| Color (APHA) | 10 max. | 5 |
| Residue after Ignition | 2 ppm max. | < 1 ppm |
| Specific Gravity at 60°/60°F | 1.416 - 1.420 | 1.418 |
| Trace Impurities (in ppm): | | |
| Chloride (Cl) | 0.04 max. | < 0.03 |
| Phosphate (PO ₄) | 0.1 max. | < 0.03 |
| Sulfate (SO ₄) | 0.4 max. | < 0.2 |
| Trace Impurities (in ppb): | | |
| Aluminum (Al) | 30 max. | 0.3 |
| Arsenic and Antimony (as As) | 5 max. | < 2 |
| Barium (Ba) | 1 max. | < 0.2 |
| Beryllium (Be) | 1 max. | < 0.2 |
| Bismuth (Bi) | 1 max. | < 1 |
| Boron (B) | 4 max. | < 0.7 |
| Cadmium (Cd) | 1 max. | < 0.3 |
| Calcium (Ca) | 50 max. | 0.5 |
| Chromium (Cr) | 10 max. | 7 |
| Cobalt (Co) | 1 max. | < 0.3 |
| Copper (Cu) | 1 max. | < 0.1 |
| Gallium (Ga) | 20 max. | < 0.2 |
| Germanium (Ge) | 4 max. | < 2 |
| Gold (Au) | 4 max. | < 0.2 |
| Heavy Metals (as Pb) | 100 max. | < 50 |
| Iron (Fe) | 10 max. | 2 |
| Lead (Pb) | 0.5 max. | < 0.5 |
| Lithium (Li) | 1 max. | < 0.2 |
| Magnesium (Mg) | 7 max. | < 0.2 |
| Manganese (Mn) | 1 max. | < 0.4 |
| Mercury (Hg) | 0.5 max. | < 0.1 |
| Molybdenum (Mo) | 5 max. | < 3 |
| Nickel (Ni) | 1 max. | < 0.3 |
| Niobium (Nb) | 1 max. | < 0.2 |
| Potassium (K) | 5 max. | < 2 |
| Silicon (Si) | 20 max. | 1 |
| Silver (Ag) | 1 max. | < 0.3 |
| Sodium (Na) | 200 max. | < 0.5 |
| Strontium (Sr) | 1 max. | < 0.2 |
| Tantalum (Ta) | 2 max. | < 0.9 |

| | | |
|---|--------|-------|
| Thallium (Tl) | 5 max. | < 2 |
| Tin (Sn) | 5 max. | < 0.8 |
| Vanadium (V) | 1 max. | < 0.2 |
| Zinc (Zn) | 5 max. | < 0.3 |
| Zirconium (Zr) | 1 max. | 0.1 |
| For Laboratory, Research or Manufacturing Use | | |

Country of Origin: USA

ISO

Phillipsburg, NJ 9001:2000 & 14001:1996
 Paris, KY 9001:2000
 Mexico City, Mexico 9001:2000
 Deventer, Holland 9001:2000 & 14001:1996
 Selangor, Malaysia 9001:2000

Marcy M. Matlosz

Marcy M. Matlosz
 Director of QA & Regulatory Affairs

For questions on this Certificate of Analysis please contact Technical Services at 1-800-582-2537 or 908-859-2151
 Mallinckrodt Baker, Inc. • 222 Red School Lane • Phillipsburg, NJ 08865 • Phone: 908.859.2151 • Fax: 908.859.6905