

Nitric Acid  
AR Select® (ACS)  
For Trace Element Analysis



Material No.: 6623-46  
Revision No.: 0

## Product Specification

Meets ACS Reagent Chemical Requirements

Test	Specification
ACS - Assay (HNO <sub>3</sub> )	68.0 - 70.0 %
Appearance	Passes Test
ACS - Color (APHA)	≤ 10
ACS - Arsenic (As)	≤ 0.010 ppm
ACS - Arsenic and Antimony (as As)	≤ 0.005 ppm
ACS - Chloride (Cl)	≤ 0.04 ppm
ACS - Heavy Metals (as Pb)	≤ 0.05 ppm
ACS - Residue after Ignition	≤ 5 ppm
ACS - Sulfate (SO <sub>4</sub> )	≤ 0.4 ppm
Determine by Flame Photometry ICP - Aluminum (Al)	≤ 50.0 ppb
Determine by Flame Photometry ICP - Barium (Ba)	≤ 1.0 ppb
Determine by Flame Photometry ICP - Beryllium (Be)	≤ 1.0 ppb
Determine by Flame Photometry ICP - Bismuth (Bi)	≤ 10.0 ppb
Determine by Flame Photometry ICP - Boron (B)	≤ 10.0 ppb
Determine by Flame Photometry ICP - Cadmium (Cd)	≤ 1.0 ppb
Determine by Flame Photometry ICP - * Calcium (Ca)	≤ 200.0 ppb
Determine by Flame Photometry ICP - Chromium (Cr)	≤ 10.0 ppb
Determine by Flame Photometry ICP - Cobalt (Co)	≤ 5.0 ppb
Determine by Flame Photometry ICP - Copper (Cu)	≤ 1.0 ppb
Determine by Flame Photometry ICP - Gallium (Ga)	≤ 20.0 ppb
Determine by Flame Photometry ICP - Germanium (Ge)	≤ 10.0 ppb
Determine by Flame Photometry ICP - Gold (Au)	≤ 10.0 ppb
Determine by Flame Photometry ICP - Iron (Fe)	≤ 40.0 ppb
Determine by Flame Photometry ICP - Lead (Pb)	≤ 1.0 ppb
Determine by Flame Photometry ICP - Lithium (Li)	≤ 5.0 ppb
Determine by Flame Photometry ICP - Magnesium (Mg)	≤ 10.0 ppb
Determine by Flame Photometry ICP - Manganese (Mn)	≤ 1.0 ppb
Determine by Flame Photometry ICP - Mercury (Hg)	≤ 1.0 ppb

>>> Continued on page 2 >>>

For questions on this Product Specification please contact Technical Services at 855.282.6867 or +1.610.386.1700  
Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Nitric Acid  
AR Select® (ACS)  
For Trace Element Analysis



Material No.: 6623-46

Test	Specification
Determine by Flame Photometry ICP - Molybdenum (Mo)	≤ 5.0 ppb
Determine by Flame Photometry ICP - Nickel (Ni)	≤ 5.0 ppb
Determine by Flame Photometry ICP - Potassium (K)	≤ 20.0 ppb
Determine by Flame Photometry ICP - * Silicon (Si)	≤ 50.0 ppb
Determine by Flame Photometry ICP - Silver (Ag)	≤ 5.0 ppb
Determine by Flame Photometry ICP - * Sodium (Na)	≤ 500.0 ppb
Determine by Flame Photometry ICP - Strontium (Sr)	≤ 1.0 ppb
Determine by Flame Photometry ICP - Thallium (Tl)	≤ 20.0 ppb
Determine by Flame Photometry ICP - Tin (Sn)	≤ 10.0 ppb
Determine by Flame Photometry ICP - Vanadium (V)	≤ 1.0 ppb
Determine by Flame Photometry ICP - Zinc (Zn)	≤ 5.0 ppb
Determine by Flame Photometry ICP - Zirconium (Zr)	≤ 10.0 ppb

For Laboratory, Research, or Manufacturing Use  
Determine by Flame Photometry & ICP  
\* May change over time due to extraction from glass container.

Packaging Site: Paris Mfg Ctr & DC

  
Jamie Ethier  
Vice President Global Quality

For questions on this Product Specification please contact Technical Services at 855.282.6867 or +1.610.386.1700  
Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700