



# Fisher Chemical

## TRACEMETAL GRADE NITRIC ACID SPECIFICATION

Fisher Chemical		Maximum Specifications	
TraceMetal Grade	TraceMetal Grade Nitric Acid, A509		
Assay (HNO <sub>3</sub> , w/w)	67 - 69%		
Colour (APHA)	10		
Analyte	Trace Impurities (in ppb)	Analyte	Trace Impurities (in ppb)
Aluminum (Al)	1	Neodymium (Nd)	0.1
Antimony (Sb)	0.5	Nickel (Ni)	0.5
Arsenic (As)	0.5	Niobium (Nb)	0.1
Barium (Ba)	0.1	Palladium (Pd)	0.5
Beryllium (Be)	0.1	Platinum (Pt)	0.5
Bismuth (Bi)	0.1	Potassium (K)	1
Boron (B)	1	Praseodymium (Pr)	0.1
Cadmium (Cd)	0.5	Rhenium (Re)	0.1
Calcium (Ca)	1	Rhodium (Rh)	0.5
Cerium (Ce)	0.1	Rubidium (Rb)	0.1
Cesium (Cs)	0.1	Ruthenium (Ru)	0.5
Chromium (Cr)	1	Samarium (Sm)	0.1
Cobalt (Co)	0.5	Scandium (Sc)	0.1
Copper (Cu)	0.5	Selenium (Se)	1
Dysprosium (Dy)	0.1	Silver (Ag)	0.1
Erbium (Er)	0.1	Sodium (Na)	1
Europium (Eu)	0.1	Strontium (Sr)	0.1
Gadolinium (Gd)	0.1	Tantalum (Ta)	Information Only
Gallium (Ga)	0.1	Tellurium (Te)	0.1
Germanium (Ge)	0.1	Terbium (Tb)	0.1
Gold (Au)	0.1	Thallium (Tl)	0.1
Hafnium (Hf)	0.1	Thorium (Th)	0.1
Holmium (Ho)	0.1	Thulium (Tm)	0.1
Indium (In)	0.1	Tin (Sn)	0.5
Iron (Fe)	1	Titanium (Ti)	0.5
Lanthanum (La)	0.1	Tungsten (W)	0.1
Lead (Pb)	0.1	Uranium (U)	0.1
Lithium (Li)	0.1	Vanadium (V)	0.5
Lutetium (Lu)	0.1	Ytterbium (Yb)	0.1
Magnesium (Mg)	1	Yttrium (Y)	0.1
Manganese (Mn)	0.1	Zinc (Zn)	0.5
Mercury (Hg)	0.1	Zirconium (Zr)	0.1
Molybdenum (Mo)	0.1		
Analyte	Trace Impurities (in ppm)	Analyte	Trace Impurities (in ppm)
Chloride (Cl)	0.2	Total Sulphur (S)	0.3
Total Phosphorus (P)	0.01		

### HNO<sub>3</sub> (67 - 69%): Properties

Molar Mass: 63.01g/mol

Density: 1.41 g/ml

Molarity: 16 moles/litre

Normality: 16 moles/litre



**Fisher Scientific**  
Part of Thermo Fisher Scientific

Fisher Scientific UK Limited  
Bishop Meadow Road  
Loughborough, Leics, LE11 5RG, UK

Tel: +44(0) 1509 231166  
Fax: +44(0) 1509 231893  
Web: [www.fisher.co.uk](http://www.fisher.co.uk)  
Email: [info@fisher.co.uk](mailto:info@fisher.co.uk)