ChemPure* Brand Chemicals

Product Code: CP-M1778P
Lot #: **3708-2014072124**

Certificate Of Analysis

...Pure Quality

Chemical Name: **Nitric Acid, 70%**
ACS/Trace Metal
Chemical Formula: HNO3

F.W.: **63.0100**
CAS: **7697-37-2**
Density: **1.4200 kg/L**

Analytical Results		
Item	**Specifications**	**Analysis**
Chloride (Cl)	0.05 ppm max.	<0.04 ppm
Chromium (Cr)	10 ppb max.	0.3 ppb
Cobalt (Co)	1 ppb max.	<0.05 ppb
Color (APHA)	10 max.	4
Copper (Cu)	1 ppb max.	0.08 ppb
Gallium (Ga)	20 ppb max.	<0.02 ppb
Germanium (Ge)	4 ppb max.	<0.07 ppb
Gold (Au)	4 ppb max.	<0.2 ppb
Heavy Metals (as Pb)	100 ppb max.	<2 ppb
Aluminum (Al)	30 ppb max.	2 ppb
Iron (Fe)	20 ppb max.	1 ppb
Lead (Pb)	0.5 ppb max.	<0.05 ppb
Lithium (Li)	1 ppb max.	<0.05 ppb
Magnesium (Mg)	7 ppb max.	0.4 ppb
Antimony (Sb)	5 ppb max.	<0.05 ppb
Manganese (Mn)	1 ppb max.	<0.05 ppb
Appearance	Clear, colorless liquid	Passes Test
Mercury (Hg)	1 ppb max.	<1 ppb
Molybdenum (Mo)	5 ppb max.	<0.05 ppb
Nickel (Ni)	2 ppb max.	0.2 ppb
Niobium (Nb)	1 ppb max.	<0.02 ppb
Arsenic (As)	5 ppb max.	<0.1 ppb
Phosphate (PO4)	0.1 ppm max.	<0.025 ppm
Potassium (K)	5 ppb max.	0.6 ppb
Residue After Ignition	5 ppm max.	1 ppm
Silicon (Si)	20 ppb max.	<3 ppb
Silver (Ag)	1 ppb max.	<0.05 ppb
Sodium (Na)	200 ppb max.	<1 ppb

Remarks:

It is certified that the above copy is a true copy of the actual lot analysis.

Matthew Taylor
Laboratory Manager

ChemPure* Brand Chemicals

Product Code: **370800-90000**
Lot #: **2014072124**

Certificate Of Analysis

...Pure Quality

Chemical Name: **Nitric Acid, 70%**
ACS/Trace Metal
Chemical Formula: HNO3

F.W.: **63.0100**
CAS: **7697-37-2**
Density: **1.4200 kg/L**

Analytical Results		
Item	**Specifications**	**Analysis**
Specific Gravity (60°F/60°F)	1.416 - 1.420	1.418
Strontium (Sr)	1 ppb max.	<0.02 ppb
Sulfate (SO4)	0.4 ppm max.	<0.025 ppm
Tantalum (Ta)	2 ppb max.	<0.02 ppb
Thallium (Tl)	5 ppb max.	<0.02 ppb
Tin (Sn)	5 ppb max.	0.06 ppb
Titanium (Ti)	300 ppb max.	<0.3 ppb
Vanadium (V)	1 ppb max.	<0.02 ppb
Zinc (Zn)	5 ppb max.	<2 ppb
Zirconium (Zr)	1 ppb max.	<0.02 ppb
Assay (HNO3)	69.0 - 70.0%	69.4%
Barium (Ba)	1 ppb max.	<0.05 ppb
Beryllium (Be)	1 ppb max.	<0.06 ppb
Bismuth (Bi)	1 ppb max.	<0.02 ppb
Boron (B)	4 ppb max.	0.3 ppb
Cadmium (Cd)	1 ppb max.	<0.05 ppb
Calcium (Ca)	100 ppb max.	2 ppb

Remarks:

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Matthew Taylor
Laboratory Manager