



Nitric Acid

ULTREX[®] II Ultrapure Reagent

Product No. 6901

Lot No. L05N51

Release Date 04/06/2012

Certificate of Analysis

TEST	SPECIFICATION	RESULT
Certificate Provided Reports Actual Lot Analysis		
Assay (HNO ₃)(w/w)	67 - 70 %	69 %
Trace Impurities in ppt (pg/g):		
Aluminum (Al)	20 max.	< 10
Antimony (Sb)	10 max.	< 5
Arsenic (As)	20 max.	< 10
Barium (Ba)	10 max.	< 1
Beryllium (Be)	10 max.	< 1
Bismuth (Bi)	10 max.	< 0.05
Boron (B)	20 max.	< 10
Cadmium (Cd)	10 max.	< 0.1
Calcium (Ca)	20 max.	< 5
Cerium (Ce)	10 max.	< 0.05
Cesium (Cs)	10 max.	< 0.05
Chromium (Cr)	20 max.	< 10
Cobalt (Co)	10 max.	< 1
Copper (Cu)	20 max.	< 1
Dysprosium (Dy)	1 max.	< 0.01
Erbium (Er)	1 max.	< 0.01
Europium (Eu)	1 max.	< 0.01
Gadolinium (Gd)	1 max.	< 0.01
Gallium (Ga)	10 max.	< 0.1
Germanium (Ge)	10 max.	< 0.1
Gold (Au)	20 max.	< 1
Hafnium (Hf)	10 max.	< 0.05
Holmium (Ho)	1 max.	< 0.01
Indium (In)	1 max.	< 0.1
Iron (Fe)	20 max.	< 10
Lanthanum (La)	1 max.	< 0.05
Lead (Pb)	10 max.	< 0.5
Lithium (Li)	10 max.	< 0.5
Lutetium (Lu)	1 max.	< 0.01
Magnesium (Mg)	10 max.	< 5
Manganese (Mn)	10 max.	< 1
Mercury (Hg)	100 max.	< 10
Molybdenum (Mo)	10 max.	< 1
Neodymium (Nd)	1 max.	< 0.05
Nickel (Ni)	50 max.	< 10
Niobium (Nb)	1 max.	< 1

Palladium (Pd)	20 max.	< 5
Platinum (Pt)	20 max.	< 1
Potassium (K)	10 max.	< 1
Praseodymium (Pr)	1 max.	< 0.05
Rhenium (Re)	10 max.	< 0.1
Rhodium (Rh)	10 max.	< 1
Rubidium (Rb)	10 max.	< 1
Ruthenium (Ru)	20 max.	< 1
Samarium (Sm)	1 max.	< 0.01
Scandium (Sc)	10 max.	< 1
Selenium (Se)	Information Only	< 5
Silver (Ag)	10 max.	< 0.5
Sodium (Na)	10 max.	< 5
Strontium (Sr)	10 max.	< 1
Tantalum (Ta)	Information Only	< 10
Tellurium (Te)	1 max.	< 0.5
Terbium (Tb)	1 max.	< 0.01
Thallium (Tl)	10 max.	< 0.05
Thorium (Th)	1 max.	< 0.05
Thulium (Tm)	1 max.	< 0.05
Tin (Sn)	20 max.	< 5
Titanium (Ti)	10 max.	< 5
Tungsten (W)	10 max.	< 1
Uranium (U)	1 max.	< 0.01
Vanadium (V)	10 max.	< 0.5
Ytterbium (Yb)	1 max.	< 0.01
Yttrium (Y)	1 max.	< 0.1
Zinc (Zn)	20 max.	< 1
Zirconium (Zr)	10 max.	< 0.5

For Laboratory, Research or Manufacturing Use

Country of Origin: CANADA

ISO	Phillipsburg, NJ 9001.2008, 14001.2004	 Richard M. Siberski Global Director of Quality Assurance
	Paris, KY 9001.2008	
	Mexico City, Mexico 9001.2008	
	Deventer, The Netherlands 9001.2008, 14001.2004, 13485.2003	
	Selangor, Malaysia 9001.2008	
	Panaji, India 9001.2008	
	Gliwice, Poland 9001.2008, 17025.2005	

For questions on this Certificate of Analysis please contact Technical Services at 855-282-6867 or 610-573-2600

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