



Hydrochloric Acid

ULTREX[®] II Ultrapure Reagent

Product No. 6900

Lot No. L05N50

Release Date 04/06/2012

Certificate of Analysis

TEST	SPECIFICATION	RESULT
Certificate Provided Reports Actual Lot Analysis		
Assay (HCl)(w/w)	33 - 36 %	34 %
Trace Impurities in ppt (pg/g):		
Aluminum (Al)	20 max.	< 20
Antimony (Sb)	20 max.	< 20
Arsenic (As)	50 max.	< 20
Barium (Ba)	10 max.	< 1
Beryllium (Be)	10 max.	< 5
Bismuth (Bi)	10 max.	< 0.5
Boron (B)	100 max.	< 20
Cadmium (Cd)	10 max.	< 0.1
Calcium (Ca)	20 max.	< 20
Cerium (Ce)	10 max.	< 0.05
Cesium (Cs)	10 max.	< 0.05
Chromium (Cr)	20 max.	< 10
Cobalt (Co)	10 max.	< 3
Copper (Cu)	20 max.	< 5
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.	< 1
Gold (Au)	100 max.	< 10
Hafnium (Hf)	10 max.	< 0.05
Holmium (Ho)	1 max.	< 0.01
Indium (In)	1 max.	< 0.1
Iron (Fe)	20 max.	< 20
Lanthanum (La)	1 max.	< 0.05
Lead (Pb)	10 max.	< 1
Lithium (Li)	10 max.	< 1
Lutetium (Lu)	10 max.	< 0.01
Magnesium (Mg)	10 max.	< 5
Manganese (Mn)	10 max.	< 2
Mercury (Hg)	100 max.	< 100
Molybdenum (Mo)	10 max.	< 10
Neodymium (Nd)	1 max.	< 0.05
Nickel (Ni)	50 max.	< 10
Niobium (Nb)	1 max.	< 1
Palladium (Pd)	Information Only	< 10

Platinum (Pt)	Information Only	< 5
Potassium (K)	10 max.	< 10
Praseodymium (Pr)	1 max.	< 0.05
Rhenium (Re)	10 max.	< 0.1
Rhodium (Rh)	10 max.	< 1
Rubidium (Rb)	10 max.	< 1
Ruthenium (Ru)	10 max.	< 10
Samarium (Sm)	1 max.	< 0.01
Scandium (Sc)	10 max.	< 1
Selenium (Se)	Information Only	< 50
Silver (Ag)	10 max.	< 5
Sodium (Na)	10 max.	< 5
Strontium (Sr)	10 max.	< 1
Tantalum (Ta)	Information Only	< 20
Tellurium (Te)	1 max.	< 1
Terbium (Tb)	1 max.	< 0.01
Thallium (Tl)	10 max.	< 0.1
Thorium (Th)	1 max.	< 0.05
Thulium (Tm)	1 max.	< 0.01
Tin (Sn)	20 max.	< 20
Titanium (Ti)	20 max.	< 10
Tungsten (W)	10 max.	< 10
Uranium (U)	1 max.	< 0.01
Vanadium (V)	10 max.	< 1
Ytterbium (Yb)	1 max.	< 0.01
Yttrium (Y)	1 max.	< 0.1
Zinc (Zn)	20 max.	< 5
Zirconium (Zr)	10 max.	< 1

For Laboratory, Research or Manufacturing Use

Country of Origin: CANADA

	Phillipsburg, NJ 9001.2008, 14001.2004 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	 Richard M. Siberski Global Director of Quality Assurance

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

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