



# Sulfuric Acid

ULTREX<sup>®</sup> II Ultrapure Reagent

Product No. 6902

Lot No. K37N61

Release Date 12/14/2011


## Certificate of Analysis

TEST	SPECIFICATION	RESULT
Certificate Provided Reports Actual Lot Analysis		
Assay (H <sub>2</sub> SO <sub>4</sub> )(w/w)	93 - 98 %	96 %
<b>Trace Impurities in ppt (pg/g):</b>		
Aluminum (Al)	50 max.	< 20
Antimony (Sb)	50 max.	< 10
Arsenic (As)	500 max.	< 500
Barium (Ba)	10 max.	< 10
Beryllium (Be)	10 max.	< 5
Bismuth (Bi)	10 max.	< 1
Cadmium (Cd)	10 max.	< 1
Calcium (Ca)	100 max.	< 40
Cerium (Ce)	10 max.	< 0.5
Cesium (Cs)	10 max.	< 1
Chromium (Cr)	10 max.	< 10
Cobalt (Co)	10 max.	< 1
Copper (Cu)	10 max.	< 5
Dysprosium (Dy)	10 max.	< 0.1
Erbium (Er)	10 max.	< 0.1
Europium (Eu)	10 max.	< 0.1
Gadolinium (Gd)	10 max.	< 0.1
Gallium (Ga)	10 max.	< 1
Germanium (Ge)	100 max.	< 100
Hafnium (Hf)	10 max.	< 0.1
Holmium (Ho)	10 max.	< 0.1
Indium (In)	10 max.	< 1
Iron (Fe)	50 max.	< 20
Lanthanum (La)	10 max.	< 1
Lead (Pb)	10 max.	< 5
Lithium (Li)	10 max.	< 10
Lutetium (Lu)	10 max.	< 0.1
Magnesium (Mg)	50 max.	< 10
Manganese (Mn)	10 max.	< 1
Mercury (Hg)	100 max.	< 50
Molybdenum (Mo)	10 max.	< 10
Neodymium (Nd)	10 max.	< 0.2
Nickel (Ni)	50 max.	< 20
Niobium (Nb)	10 max.	< 1
Palladium (Pd)	Information Only	< 10
Platinum (Pt)	Information Only	< 10

Potassium (K)	50 max.	< 50
Praseodymium (Pr)	10 max.	< 0.1
Rhodium (Rh)	50 max.	< 1
Rubidium (Rb)	10 max.	< 1
Samarium (Sm)	10 max.	< 0.1
Scandium (Sc)	10 max.	< 5
Selenium (Se)	500 max.	< 500
Silver (Ag)	50 max.	< 5
Sodium (Na)	50 max.	< 50
Strontium (Sr)	10 max.	< 1
Tantalum (Ta)	Information Only	< 20
Tellurium (Te)	100 max.	< 10
Terbium (Tb)	10 max.	< 0.1
Thallium (Tl)	10 max.	< 1
Thorium (Th)	10 max.	< 0.1
Thulium (Tm)	10 max.	< 0.1
Tin (Sn)	50 max.	< 50
Titanium (Ti)	50 max.	< 50
Tungsten (W)	10 max.	< 5
Uranium (U)	10 max.	< 0.1
Vanadium (V)	10 max.	< 5
Ytterbium (Yb)	10 max.	< 0.1
Yttrium (Y)	10 max.	< 1
Zinc (Zn)	50 max.	< 10
Zirconium (Zr)	10 max.	< 5

For Laboratory, Research or Manufacturing Use

Country of Origin: CANADA

<b>ISO</b>	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	
		<b>Richard M. Siberski</b> Global Director of Quality Assurance

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

Avantor™ Performance Materials, Inc.

3477 Corporate Parkway • Suite #200 • Center Valley, PA 18034 • U.S.A. • Phone: 610.573.2600 • Fax: 610.573.2610