

Acetic Acid, Glacial  
ULTREX® II Ultrapure Reagent



Material No.: 6903-05  
Batch No.: 0000008526  
Manufactured Date: 2012/07/09  
Expiration Date: 2015/07/09

## Certificate of Analysis

Test	Specification	Result
Assay (CH <sub>3</sub> COOH)	>= 99.0 %	99.9
Trace Impurities - Aluminum (Al)	<= 50 ppt	< 20
Trace Impurities - Antimony (Sb)	<= 50 ppt	< 1
Trace Impurities - Arsenic (As)	<= 50 ppt	< 5
Trace Impurities - Barium (Ba)	<= 10 ppt	< 1
Trace Impurities - Beryllium (Be)	<= 10 ppt	< 1
Trace Impurities - Bismuth (Bi)	<= 10 ppt	< 1
Trace Impurities - Cadmium (Cd)	<= 10 ppt	< 1
Trace Impurities - Calcium (Ca)	<= 50 ppt	< 20
Trace Impurities - Cerium (Ce)	<= 10 ppt	< 1
Trace Impurities - Cesium (Cs)	<= 10 ppt	< 1
Trace Impurities - Chromium (Cr)	<= 10 ppt	< 10
Trace Impurities - Cobalt (Co)	<= 10 ppt	< 1
Trace Impurities - Copper (Cu)	<= 50 ppt	< 5
Trace Impurities - Dysprosium (Dy)	<= 1 ppt	< 1
Trace Impurities - Erbium (Er)	<= 1 ppt	< 1
Trace Impurities - Europium (Eu)	<= 1 ppt	< 1
Trace Impurities - Gadolinium (Gd)	<= 1 ppt	< 1
Trace Impurities - Gallium (Ga)	<= 10 ppt	< 1
Trace Impurities - Germanium (Ge)	<= 10 ppt	< 5
Trace Impurities - Hafnium (Hf)	<= 10 ppt	< 5
Trace Impurities - Holmium (Ho)	<= 1 ppt	< 1
Trace Impurities - Indium (In)	<= 1 ppt	< 1
Trace Impurities - Iron (Fe)	<= 50 ppt	< 20

Test	Specification	Result
Trace Impurities – Lanthanum (La)	<= 1 ppt	< 1
Trace Impurities – Lead (Pb)	<= 10 ppt	< 2
Trace Impurities – Lithium (Li)	<= 10 ppt	< 1
Trace Impurities – Lutetium (Lu)	<= 10 ppt	< 1
Trace Impurities – Magnesium (Mg)	<= 50 ppt	< 10
Trace Impurities – Manganese (Mn)	<= 10 ppt	< 1
Trace Impurities – Molybdenum (Mo)	<= 10 ppt	< 10
Trace Impurities – Neodymium (Nd)	<= 1 ppt	< 1
Trace Impurities – Nickel (Ni)	<= 50 ppt	< 5
Trace Impurities – Platinum (Pt)	<= 50 ppt	< 10
Trace Impurities – Potassium (K)	<= 50 ppt	< 10
Trace Impurities – Praseodymium (Pr)	<= 1 ppt	< 1
Trace Impurities – Rhenium (Re)	<= 10 ppt	< 1
Trace Impurities – Rhodium (Rh)	<= 50 ppt	< 5
Trace Impurities – Rubidium (Rb)	<= 10 ppt	< 1
Trace Impurities – Ruthenium (Ru)	<= 50 ppt	< 1
Trace Impurities – Samarium (Sm)	<= 1 ppt	< 1
Trace Impurities – Scandium (Sc)	<= 10 ppt	< 1
Trace Impurities – Selenium (Se), For Information Only	ppt	20
Trace Impurities – Silver (Ag)	<= 50 ppt	< 1
Trace Impurities – Sodium (Na)	<= 100 ppt	< 20
Trace Impurities – Strontium (Sr)	<= 10 ppt	< 5
Trace Impurities – Tellurium (Te)	<= 1 ppt	< 1
Trace Impurities – Terbium (Tb)	<= 1 ppt	< 1
Trace Impurities – Thallium (Tl)	<= 10 ppt	< 1
Trace Impurities – Thorium (Th)	<= 1 ppt	< 1
Trace Impurities – Thulium (Tm)	<= 1 ppt	< 1
Trace Impurities – Tin (Sn)	<= 50 ppt	< 10
Trace Impurities – Titanium (Ti)	<= 10 ppt	< 10
Trace Impurities – Tungsten (W)	<= 10 ppt	< 10
Trace Impurities – Uranium (U)	<= 1 ppt	< 1
Trace Impurities – Vanadium (V)	<= 10 ppt	< 5
Trace Impurities – Ytterbium (Yb)	<= 1 ppt	< 1
Trace Impurities – Yttrium (Y)	<= 1 ppt	< 1
Trace Impurities – Zinc (Zn)	<= 50 ppt	< 20
Trace Impurities – Zirconium (Zr)	<= 10 ppt	< 1

For Laboratory, Research, or Manufacturing Use  
 Certificate Provided Reports Actual Lot Analysis

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Storage Conditions: IMPORTANT: Material will freeze if stored below 17 °C (63°F).  
Country of Origin: CA

ISO

Phillipsburg, NJ 9001.2008, 14001.2004  
Paris, KY 9001.2008  
Mexico city, Mexico 9001.2008  
Deventer, The Netherlands 9001.2008, 14001.2004  
Selangor, Malaysia 9001.2008  
Panoli, India 9001.2008  
Gliwice, Poland 9001.2008, 17025.2005



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Global Director of Quality Assurance

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