



ACETIC ACID

PRODUCT NUMBER: S010601

LOT NUMBER: 6109060

RELEASE DATE: July, 2009

EXPIRY DATE: July, 2012

CERTIFICATE OF ANALYSIS

CH₃COOH (≥99%): Properties

Molar Mass: 60.05g/mol

Density: 1.05 g/ml

Molarity: 18 moles/litre

Normality: 18 moles/litre

Tests	Maximum Specification	Actual Value	Units
ASSAY (CH ₃ COOH, w/w):	≥ 99%	99.6%	% by w/w
Colour:	10	< 10	APHA

Analyte	Maximum Specification	Actual Value (in ppb)	Analyte	Maximum Specification	Actual Value (in ppb)
Aluminum (Al)	1 ppb	< 0.5	Molybdenum (Mo)	0.5 ppb	< 0.2
Antimony (Sb)	0.5 ppb	< 0.1	Neodymium (Nd)	0.1 ppb	< 0.1
Arsenic (As)	0.5 ppb	< 0.1	Nickel (Ni)	0.5 ppb	< 0.1
Barium (Ba)	0.5 ppb	< 0.1	Platinum (Pt)	0.5 ppb	< 0.1
Beryllium (Be)	0.1 ppb	< 0.1	Potassium (K)	1 ppb	< 0.5
Bismuth (Bi)	0.1 ppb	< 0.1	Praseodymium (Pr)	0.1 ppb	< 0.1
Cadmium (Cd)	0.5 ppb	< 0.1	Rhenium (Re)	0.1 ppb	< 0.1
Calcium (Ca)	1 ppb	< 0.5	Rhodium (Rh)	0.5 ppb	< 0.1
Cerium (Ce)	0.1 ppb	< 0.1	Rubidium (Rb)	0.1 ppb	< 0.1
Cesium (Cs)	0.1 ppb	< 0.1	Ruthenium (Ru)	0.5 ppb	< 0.1
Chromium (Cr)	1 ppb	< 0.1	Samarium (Sm)	0.1 ppb	< 0.1
Cobalt (Co)	0.1 ppb	< 0.1	Scandium (Sc)	0.1 ppb	< 0.1
Copper (Cu)	0.5 ppb	< 0.2	Selenium (Se)	1 ppb	< 0.5
Dysprosium (Dy)	0.1 ppb	< 0.1	Silver (Ag)	1 ppb	< 0.1
Erbium (Er)	0.1 ppb	< 0.1	Sodium (Na)	1 ppb	< 0.5
Europium (Eu)	0.1 ppb	< 0.1	Strontium (Sr)	0.5 ppb	< 0.1
Gadolinium (Gd)	0.1 ppb	< 0.1	Tellurium (Te)	0.5 ppb	< 0.1
Gallium (Ga)	0.1 ppb	< 0.1	Terbium (Tb)	0.1 ppb	< 0.1
Germanium (Ge)	0.5 ppb	< 0.1	Thallium (Tl)	0.1 ppb	< 0.1
Hafnium (Hf)	0.1 ppb	< 0.1	Thorium (Th)	0.1 ppb	< 0.1
Holmium (Ho)	0.1 ppb	< 0.1	Thulium (Tm)	0.1 ppb	< 0.1
Indium (In)	0.1 ppb	< 0.1	Tin (Sn)	0.5 ppb	< 0.1
Iron (Fe)	1 ppb	< 0.5	Titanium (Ti)	0.5 ppb	< 0.1
Lanthanum (La)	0.1 ppb	< 0.1	Tungsten (W)	0.5 ppb	< 0.1
Lead (Pb)	0.1 ppb	< 0.1	Uranium (U)	0.1 ppb	< 0.1
Lithium (Li)	0.1 ppb	< 0.1	Vanadium (V)	0.5 ppb	< 0.1
Lutetium (Lu)	0.1 ppb	< 0.1	Ytterbium (Yb)	0.1 ppb	< 0.1
Magnesium (Mg)	0.5 ppb	< 0.2	Yttrium (Y)	0.1 ppb	< 0.1
Manganese (Mn)	0.5 ppb	< 0.1	Zinc (Zn)	1 ppb	< 0.5
Mercury (Hg)	1 ppb	< 1	Zirconium (Zr)	0.1 ppb	< 0.1

Analyte	Maximum Specification	Actual Value (in ppm)	Analyte	Maximum Specification	Actual Value (in ppm)
Chloride (Cl ⁻)	1 ppm	< 1	Substances Reducing Dichromate (K ₂ Cr ₂ O ₇)	To Pass Test	Passes Test
Phosphate (PO ₄ ³⁻)	1 ppm	< 1	Substances Reducing Permanganate (KMnO ₄)	To Pass Test	Passes Test
Sulphate (SO ₄ ²⁻)	0.5 ppm	< 0.5			

Element concentrations are at the point of bottling. Concentrations of some elements will increase due to the storage container.

Glass bottles: Al, B, Ca, K, Mg, Mn, Na & Si.

Polyethylene bottles: Al, Ca, Fe, Na & Zn.

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