



Hydrogen Peroxide, 30%

CMOS™
(Stabilized)

Product No. 2190
Lot No. L16A07
Release Date 04/23/2012

Certificate of Analysis

TEST	SPECIFICATION	RESULT
Assay (H ₂ O ₂)	30.0 - 32.0 %	31.0 %
Color (APHA)	10 max.	5
Free Acid (ueq/g)	0.2 max.	< 0.05
Residue after Evaporation	10 ppm max.	5 ppm
Trace Impurities (in ppm):		
Ammonium (NH ₄)	3 max.	< 3
Chloride (Cl)	0.2 max.	< 0.001
Nitrate (NO ₃)	2 max.	< 2
Phosphate (PO ₄)	1 max.	< 0.5
Sulfate (SO ₄)	3 max.	< 3
Trace Impurities (in ppb):		
Aluminum (Al)	70 max.	< 5
Arsenic and Antimony (as As)	10 max.	< 10
Barium (Ba)	20 max.	< 1
Beryllium (Be)	10 max.	< 1
Bismuth (Bi)	20 max.	< 10
Boron (B)	10 max.	< 5
Cadmium (Cd)	10 max.	< 1
Calcium (Ca)	50 max.	< 1
Chromium (Cr)	20 max.	< 1
Cobalt (Co)	10 max.	< 1
Copper (Cu)	10 max.	< 1
Gallium (Ga)	20 max.	< 1
Germanium (Ge)	10 max.	< 10
Gold (Au)	10 max.	< 5
Heavy Metals (as Pb)	500 max.	< 250
Iron (Fe)	50 max.	< 1
Lead (Pb)	10 max.	< 10
Lithium (Li)	10 max.	< 1
Magnesium (Mg)	10 max.	< 1
Manganese (Mn)	10 max.	< 1
Molybdenum (Mo)	10 max.	< 5
Nickel (Ni)	10 max.	< 5
Niobium (Nb)	10 max.	< 1
Potassium (K)	600 max.	246
Silicon (Si)	100 max.	< 10
Silver (Ag)	10 max.	< 1
Sodium (Na)	100 max.	< 5
Strontium (Sr)	10 max.	< 1

Tantalum (Ta)	10 max.	< 5
Thallium (Tl)	50 max.	< 5
Tin (Sn)	190 500	316
Titanium (Ti)	10 max.	< 1
Vanadium (V)	10 max.	< 1
Zinc (Zn)	50 max.	< 1
Zirconium (Zr)	10 max.	< 1
Particle Count, per ml:		
0.5 um and greater	100 max.	14
1.0 um and greater	10 max.	3
For Microelectronic Use		
USE BEFORE October 31, 2013		
Country of Origin: USA		
 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

Avantor™ Performance Materials, Inc.

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