Hydrogen Peroxide, 30% Electronic Grade (Stabilized)





Material No.: 2204-01 Batch No.: 0000210504 Manufactured Date: 2018/09/21 Expiration Date: 2020/03/21 Revision No: 1

## Certificate of Analysis

Test	Specification	Result
Assay (H2O2)	30.0 - 32.0 %	31.6
Color (APHA)	<= 10	5
Free Acid (µeq/g)	<= 0.2	< 0.2
Residue after Evaporation	<= 15 ppm	2
Ammonium (NH₄)	<= 3 ppm	< 3
Chloride (Cl)	<= 2 ppm	< 2
Nitrate (NO3)	<= 2 ppm	< 2
Phosphate (PO4)	<= 2 ppm	< 2
ACS – Sulfate (SO4)	<= 5 ppm	< 5
Trace Impurities – Aluminum (Al)	<= 200.0 ppb	11.6
Trace Impurities – Antimony (Sb)	<= 10.0 ppb	< 1.0
Trace Impurities – Arsenic (As)	<= 10.0 ppb	< 2.0
Arsenic and Antimony (as As)	<= 10 ppb	< 10
Trace Impurities – Barium (Ba)	<= 20.0 ppb	1.7
Trace Impurities – Beryllium (Be)	<= 10.0 ppb	< 1.0
Trace Impurities – Bismuth (Bi)	<= 20.0 ppb	< 10.0
Trace Impurities – Boron (B)	<= 10.0 ppb	< 1.0
Trace Impurities – Cadmium (Cd)	<= 10.0 ppb	< 1.0
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	1.0
Trace Impurities – Chromium (Cr)	<= 20.0 ppb	1.9
Trace Impurities – Cobalt (Co)	<= 10.0 ppb	< 1.0
Trace Impurities – Copper (Cu)	<= 10.0 ppb	< 1.0
Trace Impurities – Gallium (Ga)	<= 20.0 ppb	< 1.0
Trace Impurities - Germanium (Ge)	<= 10.0 ppb	< 10.0

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700 Avantor Performance Materials, LLC 100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Test	Specification	Result
race Impurities – Gold (Au)	<= 10.0 ppb	< 5.0
leavy Metals (as Pb)	<= 500 ppb	< 250
race Impurities – Iron (Fe)	<= 50.0 ppb	4.0
race Impurities – Lead (Pb)	<= 10.0 ppb	< 10.0
race Impurities – Lithium (Li)	<= 10.0 ppb	< 1.0
race Impurities – Magnesium (Mg)	<= 10.0 ppb	< 1.0
race Impurities – Manganese (Mn)	<= 10.0 ppb	< 1.0
race Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
race Impurities – Nickel (Ni)	<= 10.0 ppb	< 5.0
race Impurities – Niobium (Nb)	<= 10.0 ppb	< 1.0
race Impurities – Potassium (K)	<= 600.0 ppb	193.0
race Impurities – Silicon (Si)	<= 100.0 ppb	< 10.0
race Impurities – Silver (Ag)	<= 10.0 ppb	< 1.0
race Impurities – Sodium (Na)	<= 500.0 ppb	< 5.0
race Impurities – Strontium (Sr)	<= 10.0 ppb	< 1.0
race Impurities – Tantalum (Ta)	<= 10.0 ppb	< 5.0
race Impurities – Thallium (Tl)	<= 50.0 ppb	< 5.0
race Impurities – Tin (Sn)	<= 1000.0 ppb	360.9
race Impurities – Titanium (Ti)	<= 10.0 ppb	< 1.0
race Impurities – Vanadium (V)	<= 10.0 ppb	< 1.0
race Impurities – Zinc (Zn)	<= 50.0 ppb	< 1.0
race Impurities – Zirconium (Zr)	<= 10.0 ppb	< 1.0

For Microelectronic Use

Country of Origin: US Packaging Site: Paris Mfg Ctr & DC



Phillipsburg, NJ 9001:2015, FSSC22000 Paris, KY 9001:2008 Mexico City, Mexico 9001:2008 Gliwice, Poland 9001:2015, 13485:2012 Selangor, Malaysia 9001:2008 Dehradun, India, 9001:2008, 14001:2004, 13485:2003 Mumbai, India, 9001:2015, 17025:2005 Panoli, India 9001:2015

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