Hydrogen Peroxide, 30% Electronic Grade (Stabilized)





Material No.: 2204-01 Batch No.: 0000067095 Manufactured Date: 2014/01/02 Expiration Date: 2015/07/03

Certificate of Analysis

Test	Specification	Result
Assay (H ₂ O ₂)	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 (NH ₄)	<= 3 ppm	< 3
Chloride (CI)	<= 2 ppm	< 1
Nitrate (NO ₃)	<= 2 ppm	< 2
Phosphate (PO ₄)	<= 2 ppm	< 1
ACS – Sulfate (SO ₄)	<= 5 ppm	< 3
Trace Impurities - Aluminum (Al)	<= 200.0 ppb	13.2
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	4.3
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	< 5.0
Trace Impurities - Cadmium (Cd)	<= 10.0 ppb	< 1.0
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	1.5
Trace Impurities - Chromium (Cr)	<= 20.0 ppb	2.9
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

Material No.: 2204-01 Batch No.: 0000067095

Test	Specification	Result
Trace Impurities – Gold (Au)	<= 10.0 ppb	< 5.0
Heavy Metals (as Pb)	<= 500 ppb	< 250
Trace Impurities – Iron (Fe)	<= 50.0 ppb	3.8
Trace Impurities – Lead (Pb)	<= 10.0 ppb	< 10.0
Trace Impurities – Lithium (Li)	<= 10.0 ppb	< 1.0
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	< 1.0
Trace Impurities – Manganese (Mn)	<= 10.0 ppb	< 1.0
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 10.0 ppb	< 5.0
Trace Impurities – Niobium (Nb)	<= 10.0 ppb	< 1.0
Trace Impurities – Potassium (K)	<= 600.0 ppb	212.2
Trace Impurities – Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities – Silver (Ag)	<= 10.0 ppb	< 1.0
Trace Impurities – Sodium (Na)	<= 500.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 10.0 ppb	< 1.0
Trace Impurities – Tantalum (Ta)	<= 10.0 ppb	< 5.0
Trace Impurities – Thallium (TI)	<= 50.0 ppb	< 5.0
Trace Impurities – Tin (Sn)	<= 1000.0 ppb	267.3
Frace Impurities – Titanium (Ti)	<= 10.0 ppb	< 1.0
Frace Impurities – Vanadium (V)	<= 10.0 ppb	< 1.0
Frace Impurities – Zinc (Zn)	<= 50.0 ppb	< 1.0
Frace Impurities – Zirconium (Zr)	<= 10.0 ppb	< 1.0

For Microelectronic Use

Country of Origin: US

Packaging Site: Paris Mfg Ctr & DC



Phillipsburg, NJ 9001:2008, 14001:2004
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 17025:2005
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008, 17025:2005

Richard M Siberski Vice President Global Quality