## 2-Propanol CMOS

(iso-propyl alcohol)





Material No.: 9079-05 Batch No.: 0000038408

Manufactured Date: 2013/03/05

Retest Date: 2018/03/04

## Certificate of Analysis

Test	Specification	Result
Assay (CH3CHOHCH3)	>= 99.5 %	100.0
Color (APHA)	<= 10	5
Residue after Evaporation	<= 4 ppm	<1
Solubility in H <sub>2</sub> O	Passes Test	PT
Water (H2O)(by Karl Fischer titrn)	<= 0.05 %	0.02
Acidity (µeq/g)	<= 0.2	<0.1
Alkalinity (µeq/g)	<= 0.1	<0.1
Chloride (Cl)	<= 0.1 ppm	<0.1
Phosphate (PO <sub>4</sub> )	<= 0.3 ppm	< 0.3
Trace Impurities – Aluminum (Al)	<= 50.0 ppb	< 5.0
Arsenic and Antimony (as As)	<= 10 ppb	< 10
Trace Impurities – Barium (Ba)	<= 20.0 ppb	< 1.0
Trace Impurities – Beryllium (Be)	<= 100.0 ppb	< 1.0
Trace Impurities – Bismuth (Bi)	<= 100.0 ppb	< 10.0
Trace Impurities – Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 20.0 ppb	< 1.0
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	4.7
Trace Impurities – Chromium (Cr)	<= 20.0 ppb	< 1.0
Trace Impurities – Cobalt (Co)	<= 20.0 ppb	< 1.0
Trace Impurities – Copper (Cu)	<= 10.0 ppb	< 1.0
Trace Impurities – Gallium (Ga)	<= 50.0 ppb	< 1.0
Trace Impurities – Germanium (Ge)	<= 50.0 ppb	< 10.0
Trace Impurities – Gold (Au)	<= 20.0 ppb	< 5.0
Heavy Metals (as Pb)	<= 200 ppb	< 100

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Test	Specification	Result
Trace Impurities – Iron (Fe)	<= 50.0 ppb	1.5
Trace Impurities – Lead (Pb)	<= 20.0 ppb	< 10.0
Trace Impurities – Lithium (Li)	<= 50.0 ppb	< 1.0
Trace Impurities – Magnesium (Mg)	<= 20.0 ppb	1.0
Trace Impurities – Manganese (Mn)	<= 15.0 ppb	< 1.0
Frace Impurities – Molybdenum (Mo)	<= 100.0 ppb	< 5.0
Frace Impurities – Nickel (Ni)	<= 10.0 ppb	< 5.0
Trace Impurities – Niobium (Nb)	<= 100.0 ppb	< 1.0
Frace Impurities – Potassium (K)	<= 100.0 ppb	< 10.0
Frace Impurities – Silicon (Si)	<= 50.0 ppb	< 10.0
race Impurities – Silver (Ag)	<= 20.0 ppb	< 1.0
Frace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
race Impurities – Strontium (Sr)	<= 20.0 ppb	< 1.0
race Impurities – Tantalum (Ta)	<= 100.0 ppb	< 5.0
Frace Impurities – Thallium (Tl)	<= 10.0 ppb	< 5.0
Frace Impurities – Tin (Sn)	<= 100.0 ppb	< 10.0
Frace Impurities – Titanium (Ti)	<= 20.0 ppb	< 1.0
Frace Impurities – Vanadium (V)	<= 100.0 ppb	< 1.0
race Impurities – Zinc (Zn)	<= 50.0 ppb	< 1.0
Trace Impurities – Zirconium (Zr)	<= 100.0 ppb	< 1.0
Particle Count – 0.2 µm and greater	<= 5000 par/ml	507
Particle Count – 0.3 µm and greater	<= 5000 par/ml	74
Particle Count – 0.5 µm and greater	<= 50 par/ml	4
Particle Count – 1.0 µm and greater	<= 8 par/ml	2

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 Panoli, India 9001:2008

Neym Sac Richard M Siberski

Global Director of Quality Assurance