

2-Propanol
CMOS

(iso-propyl alcohol)



Material No.: 9059-08
Batch No.: 0000061307
Manufactured Date: 2013/10/13
Retest Date: 2018/10/12

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ CHOHCH ₃)	>= 99.5 %	100.0
Color (APHA)	<= 10	5
Residue after Evaporation	<= 4 ppm	< 1
Solubility in H ₂ O	Passes Test	PT
Water (H ₂ O)(by Karl Fischer titrn)	<= 0.05 %	< 0.01
Acidity (µeq/g)	<= 0.2	0.1
Alkalinity (µeq/g)	<= 0.1	< 0.1
Chloride (Cl)	<= 0.1 ppm	< 0.1
Phosphate (PO ₄)	<= 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	5.7
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

Test	Specification	Result
Trace Impurities – Iron (Fe)	<= 50.0 ppb	< 1.0
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
Trace Impurities – Molybdenum (Mo)	<= 100.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 10.0 ppb	< 5.0
Trace Impurities – Niobium (Nb)	<= 100.0 ppb	< 1.0
Trace Impurities – Potassium (K)	<= 100.0 ppb	< 10.0
Trace Impurities – Silicon (Si)	<= 50.0 ppb	< 10.0
Trace Impurities – Silver (Ag)	<= 20.0 ppb	< 1.0
Trace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 20.0 ppb	< 1.0
Trace Impurities – Tantalum (Ta)	<= 100.0 ppb	< 5.0
Trace Impurities – Thallium (Tl)	<= 10.0 ppb	< 5.0
Trace Impurities – Tin (Sn)	<= 100.0 ppb	< 10.0
Trace Impurities – Titanium (Ti)	<= 20.0 ppb	< 1.0
Trace Impurities – Vanadium (V)	<= 100.0 ppb	< 1.0
Trace Impurities – Zinc (Zn)	<= 50.0 ppb	1.0
Trace Impurities – Zirconium (Zr)	<= 100.0 ppb	< 1.0
Particle Count at point of fill – 0.5 µm and greater (Rion KS42AF)	<= 150 par/ml	18
Particle Count at point of fill – 1.0 µm and greater (Rion KS42AF)	<= 25 par/ml	11

For Microelectronic Use

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

Richard M Siberski
 Global Director of Quality Assurance