

2-Propanol  
CMOS

(iso-propyl alcohol)



Material No.: 9059-08  
Batch No.: 0000108878  
Manufactured Date: 2015/04/07  
Retest Date: 2020/04/05

## Certificate of Analysis

| Test  | Specification | Result |
|---|---------------|--------|
| Assay (CH <sub>3</sub> CHOHCH <sub>3</sub> )    | >= 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 (H <sub>2</sub> O)(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   | < 1.0  |
| 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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|--|---------------|--------|
| 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  | 9.0    |
| 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 | 15     |
| Particle Count at point of fill – 1.0 µm and greater (Rion KS42AF) | <= 25 par/ml  | 2      |

For Microelectronic Use

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



Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000  
 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



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