2-Propanol CMOS

(iso-propyl alcohol)





Material No.: 9059-08 Batch No.: 0000249875 Manufactured Date: 2019/12/13 Retest Date: 2024/12/11 Revision No: 1

## Certificate of Analysis

| Test                               | Specification | Result |
|------------------------------------|---------------|--------|
| ssay (CH3CHOHCH3)                  | >= 99.5 %     | 100.0  |
| Color (APHA)                       | <= 10         | < 5    |
| esidue after Evaporation           | <= 4 ppm      | < 1    |
| olubility in H2O                   | Passes Test   | РТ     |
| Vater (H2O)(by Karl Fischer titrn) | <= 0.05 %     | 0.01   |
| cidity (µeq/g)                     | <= 0.2        | 0.1    |
| lkalinity (µeq/g)                  | <= 0.1        | < 0.1  |
| Chloride (Cl)                      | <= 0.1 ppm    | < 0.1  |
| hosphate (PO4)                     | <= 0.3 ppm    | < 0.3  |
| race Impurities – Aluminum (Al)    | <= 50.0 ppb   | < 5.0  |
| rsenic and Antimony (as As)        | <= 10 ppb     | < 10   |
| race Impurities – Barium (Ba)      | <= 20.0 ppb   | < 1.0  |
| race Impurities – Beryllium (Be)   | <= 100.0 ppb  | < 1.0  |
| race Impurities – Bismuth (Bi)     | <= 100.0 ppb  | < 10.0 |
| race Impurities – Boron (B)        | <= 10.0 ppb   | < 5.0  |
| race Impurities – Cadmium (Cd)     | <= 20.0 ppb   | < 1.0  |
| race Impurities – Calcium (Ca)     | <= 50.0 ppb   | 2.9    |
| race Impurities – Chromium (Cr)    | <= 20.0 ppb   | < 1.0  |
| race Impurities – Cobalt (Co)      | <= 20.0 ppb   | < 1.0  |
| race Impurities – Copper (Cu)      | <= 10.0 ppb   | < 1.0  |
| race Impurities – Gallium (Ga)     | <= 50.0 ppb   | < 1.0  |
| race Impurities – Germanium (Ge)   | <= 50.0 ppb   | < 10.0 |
| race Impurities – Gold (Au)        | <= 20.0 ppb   | < 5.0  |
| leavy Metals (as Pb)               | <= 200 ppb    | < 100  |

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 |
|-----------------------------------------------------------------------|---------------|--------|
| 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   | 3.0    |
| 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 (TI)                                      | <= 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<br>(Rion KS42AF) | <= 150 par/ml | 10     |
| Particle Count at point of fill – 1.0 μm and greater<br>(Rion KS42AF) | <= 25 par/ml  | 3      |

For Microelectronic Use

Country of Origin:USPackaging Site:Paris Mfg Ctr & DC

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