2-Propanol CMOS

(iso-propyl alcohol)





Material No.: 9079-05 Batch No.: 0000234399 Manufactured Date: 2019/06/14 Retest Date: 2024/06/12 Revision No: 1

Certificate of Analysis

| Test | Specification | Result |
|------------------------------------|---------------|--------|
| Assay (CH3CHOHCH3) | >= 99.5 % | 100.0 |
| Color (APHA) | <= 10 | < 5 |
| Residue after Evaporation | <= 4 ppm | < 1 |
| Solubility in H₂O | Passes Test | РТ |
| Nater (H2O)(by Karl Fischer titrn) | <= 0.05 % | 0.03 |
| Acidity (µeq/g) | <= 0.2 | 0.1 |
| Alkalinity (µeq/g) | <= 0.1 | < 0.1 |
| Chloride (Cl) | <= 0.1 ppm | < 0.1 |
| Phosphate (PO4) | <= 0.3 ppm | < 0.3 |
| Frace Impurities – Aluminum (Al) | <= 50.0 ppb | < 5.0 |
| Arsenic and Antimony (as As) | <= 10 ppb | < 10 |
| Frace Impurities – Barium (Ba) | <= 20.0 ppb | < 1.0 |
| Frace Impurities – Beryllium (Be) | <= 100.0 ppb | < 1.0 |
| Frace Impurities – Bismuth (Bi) | <= 100.0 ppb | < 10.0 |
| Frace Impurities – Boron (B) | <= 10.0 ppb | < 5.0 |
| Frace Impurities – Cadmium (Cd) | <= 20.0 ppb | < 1.0 |
| Frace Impurities – Calcium (Ca) | <= 50.0 ppb | 1.0 |
| Frace Impurities – Chromium (Cr) | <= 20.0 ppb | < 1.0 |
| Frace Impurities – Cobalt (Co) | <= 20.0 ppb | < 1.0 |
| Frace Impurities – Copper (Cu) | <= 10.0 ppb | < 1.0 |
| Frace Impurities – Gallium (Ga) | <= 50.0 ppb | < 1.0 |
| Frace Impurities – Germanium (Ge) | <= 50.0 ppb | < 1.0 |
| Frace Impurities – Gold (Au) | <= 20.0 ppb | < 10.0 |
| Heavy 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 |
|------------------------------------|----------------|--------|
| race Impurities – Iron (Fe) | <= 50.0 ppb | < 5.0 |
| race Impurities – Lead (Pb) | <= 20.0 ppb | < 1.0 |
| race Impurities – Lithium (Li) | <= 50.0 ppb | < 10.0 |
| race Impurities – Magnesium (Mg) | <= 20.0 ppb | < 1.0 |
| race Impurities – Manganese (Mn) | <= 15.0 ppb | < 1.0 |
| race Impurities – Molybdenum (Mo) | <= 100.0 ppb | < 5.0 |
| race Impurities – Nickel (Ni) | <= 10.0 ppb | < 5.0 |
| race Impurities – Niobium (Nb) | <= 100.0 ppb | < 1.0 |
| race Impurities – Potassium (K) | <= 100.0 ppb | < 10.0 |
| race Impurities – Silicon (Si) | <= 50.0 ppb | < 10.0 |
| race Impurities – Silver (Ag) | <= 20.0 ppb | < 1.0 |
| race 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 |
| race Impurities – Thallium (TI) | <= 10.0 ppb | < 5.0 |
| race Impurities – Tin (Sn) | <= 100.0 ppb | < 10.0 |
| race Impurities – Titanium (Ti) | <= 20.0 ppb | < 1.0 |
| race Impurities – Vanadium (V) | <= 100.0 ppb | < 1.0 |
| race Impurities – Zinc (Zn) | <= 50.0 ppb | 7.0 |
| race Impurities – Zirconium (Zr) | <= 100.0 ppb | < 1.0 |
| article Count – 0.2 µm and greater | <= 5000 par/ml | 125 |
| article Count - 0.3 µm and greater | <= 5000 par/ml | 21 |
| article Count – 0.5 µm and greater | <= 50 par/ml | 6 |
| article Count - 1.0 µm and greater | <= 8 par/ml | 3 |

For Microelectronic Use

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

James Techie

Jamie Ethier Vice President Global Quality

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