

2-Propanol
CMOS
(iso-propyl alcohol)



Material No.: 9079-05
Batch No.: 22A0561013
Manufactured Date: 2021-12-20
Retest Date: 2026-12-19
Revision No.: 0

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 ppm |
| Solubility in H ₂ O | Passes Test | Passes Test |
| Water (H ₂ 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) | ≤ 0.2 ppm | < 0.2 ppm |
| Phosphate (PO ₄) | ≤ 0.3 ppm | < 0.3 ppm |
| Trace Impurities - Aluminum (Al) | ≤ 50.0 ppb | < 5.0 ppb |
| Arsenic and Antimony (as As) | ≤ 10.0 ppb | < 10.0 ppb |
| Trace Impurities - Barium (Ba) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities - Beryllium (Be) | ≤ 100.0 ppb | < 1.0 ppb |
| Trace Impurities - Bismuth (Bi) | ≤ 100.0 ppb | < 10.0 ppb |
| Trace Impurities - Boron (B) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities - Cadmium (Cd) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities - Calcium (Ca) | ≤ 50.0 ppb | 2.8 ppb |
| Trace Impurities - Chromium (Cr) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities - Cobalt (Co) | ≤ 20 ppb | < 1 ppb |
| Trace Impurities - Copper (Cu) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Gallium (Ga) | ≤ 50 ppb | < 1 ppb |
| Trace Impurities - Germanium (Ge) | ≤ 50.0 ppb | < 10.0 ppb |
| Trace Impurities - Gold (Au) | ≤ 20 ppb | < 5 ppb |
| Heavy Metals (as Pb) | ≤ 200.0 ppb | < 200.0 ppb |
| Trace Impurities - Iron (Fe) | ≤ 50.0 ppb | < 1.0 ppb |
| Trace Impurities - Lead (Pb) | ≤ 20.0 ppb | < 10.0 ppb |
| Trace Impurities - Lithium (Li) | ≤ 50.0 ppb | < 1.0 ppb |
| Trace Impurities - Magnesium (Mg) | ≤ 20 ppb | < 1 ppb |

>>> Continued on page 2 >>>

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

2-Propanol
CMOS
(iso-propyl alcohol)



Material No.: 9079-05
Batch No.: 22A0561013

| Test | Specification | Result |
|-------------------------------------|---------------|------------|
| Trace Impurities - Manganese (Mn) | ≤ 15.0 ppb | < 1.0 ppb |
| Trace Impurities - Molybdenum (Mo) | ≤ 100.0 ppb | < 5.0 ppb |
| Trace Impurities - Nickel (Ni) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities - Niobium (Nb) | ≤ 100.0 ppb | < 1.0 ppb |
| Trace Impurities - Potassium (K) | ≤ 100 ppb | < 10 ppb |
| Trace Impurities - Silicon (Si) | ≤ 50 ppb | < 10 ppb |
| Trace Impurities - Silver (Ag) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities - Sodium (Na) | ≤ 100.0 ppb | 7.1 ppb |
| Trace Impurities - Strontium (Sr) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities - Tantalum (Ta) | ≤ 100.0 ppb | < 5.0 ppb |
| Trace Impurities - Thallium (Tl) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities - Tin (Sn) | ≤ 100 ppb | < 10 ppb |
| Trace Impurities - Titanium (Ti) | ≤ 20 ppb | < 1 ppb |
| Trace Impurities - Vanadium (V) | ≤ 100.0 ppb | < 1.0 ppb |
| Trace Impurities - Zinc (Zn) | ≤ 50 ppb | 1 ppb |
| Trace Impurities - Zirconium (Zr) | ≤ 100.0 ppb | < 1.0 ppb |
| Particle Count - 0.2 µm and greater | ≤ 5000 par/ml | 370 par/ml |
| Particle Count - 0.3 µm and greater | ≤ 5000 par/ml | 30 par/ml |
| Particle Count - 0.5 µm and greater | ≤ 50 par/ml | 3 par/ml |
| Particle Count - 1.0 µm and greater | ≤ 8 par/ml | 1 par/ml |

>>> Continued on page 3 >>>

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

2-Propanol
CMOS
(iso-propyl alcohol)



Material No.: 9079-05
Batch No.: 22A0561013

| Test | Specification | Result |
|------|---------------|--------|
|------|---------------|--------|

For Microelectronic Use
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC


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