

Material No.: 9005-68 Batch No.: 0000285954

Manufactured Date: 2021/06/22

Retest Date: 2026/06/21 Revision No: 1

## Certificate of Analysis

| Test  | Specification | Result |
|---|---------------|--------|
| Assay ((CH3)2CO) (by GC, corrected for water) | >= 99.5 %     | 99.8   |
| Color (APHA)                                  | <= 10         | < 5    |
| Residue after Evaporation                     | <= 5 ppm      | 2      |
| Titrable Acid (µeq/g)                         | <= 0.3        | 0.2    |
| Titrable Base (µeq/g)                         | <= 0.5        | 0.1    |
| Water (H <sub>2</sub> O)                      | <= 0.5 %      | 0.2    |
| Solubility in H <sub>2</sub> O                | Passes Test   | PT     |
| Chloride (Cl)                                 | <= 0.2 ppm    | < 0.2  |
| Phosphate (PO <sub>4</sub> )                  | <= 0.05 ppm   | < 0.05 |
| Trace Impurities - Aluminum (Al)              | <= 50.0 ppb   | < 5.0  |
| Arsenic and Antimony (as As)                  | <= 5 ppb      | < 5    |
| Trace Impurities - Barium (Ba)                | <= 20.0 ppb   | < 1.0  |
| Trace Impurities - Beryllium (Be)             | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Bismuth (Bi)               | <= 20.0 ppb   | < 10.0 |
| Trace Impurities - Boron (B)                  | <= 10.0 ppb   | < 5.0  |
| Trace Impurities - Cadmium (Cd)               | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Calcium (Ca)               | <= 25.0 ppb   | 6.7    |
| Trace Impurities - Chromium (Cr)              | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Cobalt (Co)                | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Copper (Cu)                | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Gallium (Ga)               | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Germanium (Ge)             | <= 10.0 ppb   | < 10.0 |
| Trace Impurities - Gold (Au)                  | <= 20.0 ppb   | < 5.0  |
| Trace Impurities – Iron (Fe)                  | <= 20.0 ppb   | < 1.0  |

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| Trace Impurities – Lead (Pb)                      | <= 10.0 ppb   | < 10.0 |
| Trace Impurities – Lithium (Li)                   | <= 10.0 ppb   | < 1.0  |
| Trace Impurities – Magnesium (Mg)                 | <= 20.0 ppb   | < 1.0  |
| Trace Impurities - Manganese (Mn)                 | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Molybdenum (Mo)                | <= 10.0 ppb   | < 5.0  |
| Trace Impurities - Nickel (Ni)                    | <= 10.0 ppb   | < 5.0  |
| Trace Impurities - Niobium (Nb)                   | <= 50.0 ppb   | < 1.0  |
| Trace Impurities – Potassium (K)                  | <= 10.0 ppb   | < 10.0 |
| Trace Impurities – Silicon (Si)                   | <= 50.0 ppb   | < 10.0 |
| Trace Impurities - Silver (Ag)                    | <= 10.0 ppb   | < 1.0  |
| Trace Impurities – Sodium (Na)                    | <= 10.0 ppb   | < 5.0  |
| Trace Impurities - Strontium (Sr)                 | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Tantalum (Ta)                  | <= 50.0 ppb   | < 5.0  |
| Trace Impurities – Thallium (TI)                  | <= 10.0 ppb   | < 5.0  |
| Trace Impurities – Tin (Sn)                       | <= 20.0 ppb   | < 10.0 |
| Trace Impurities - Titanium (Ti)                  | <= 10.0 ppb   | < 1.0  |
| Trace Impurities - Vanadium (V)                   | <= 10.0 ppb   | < 1.0  |
| Trace Impurities – Zinc (Zn)                      | <= 20.0 ppb   | 6.8    |
| Trace Impurities – Zirconium (Zr)                 | <= 10.0 ppb   | < 1.0  |
| Particle Count – 0.5 µm and greater (Rion KS42AF) | <= 100 par/ml | 3      |
| Particle Count - 1.0 µm and greater (Rion KS42AF) | <= 8 par/ml   | 1      |

For Microelectronic Use

Country of Origin: US

Packaging Site: Paris Mfg Ctr & DC

