

Phosphoric Acid, 85%  
CMOS  
(orthophosphoric acid)



Material No.: 0264-05  
Batch No.: 23C2162015  
Manufactured Date: 2023-03-08  
Retest Date: 2028-03-06  
Revision No.: 0

## Certificate of Analysis

| Test                                                    | Specification | Result      |
|---------------------------------------------------------|---------------|-------------|
| Assay (H <sub>3</sub> PO <sub>4</sub> ) (by acidimetry) | 85.0 – 87.0 % | 86.0 %      |
| Color (APHA)                                            | ≤ 10          | 5           |
| Specific Gravity at 60°/60°F                            | 1.691 – 1.710 | 1.704       |
| Reducing Substances                                     | Passes Test   | Passes Test |
| Volatile Acids (µeq/g)                                  | ≤ 0.16        | 0.05        |
| Chloride (Cl)                                           | ≤ 1.0 ppm     | < 0.5 ppm   |
| Nitrate (NO <sub>3</sub> )                              | ≤ 2 ppm       | < 2 ppm     |
| Sulfate (SO <sub>4</sub> )                              | ≤ 12 ppm      | < 4 ppm     |
| Trace Impurities – Aluminum (Al)                        | ≤ 0.500 ppm   | < 0.020 ppm |
| Trace Impurities – Antimony (Sb)                        | ≤ 10.000 ppm  | < 0.300 ppm |
| Trace Impurities – Arsenic (As)                         | ≤ 0.050 ppm   | < 0.030 ppm |
| Trace Impurities – Calcium (Ca)                         | ≤ 1.500 ppm   | < 0.020 ppm |
| Trace Impurities – Chromium (Cr)                        | ≤ 0.200 ppm   | < 0.020 ppm |
| Trace Impurities – Cobalt (Co)                          | ≤ 0.050 ppm   | < 0.010 ppm |
| Trace Impurities – Copper (Cu)                          | ≤ 0.050 ppm   | < 0.010 ppm |
| Trace Impurities – Gold (Au)                            | ≤ 0.300 ppm   | < 0.030 ppm |
| Trace Impurities – ACS – Heavy Metals (as Pb)           | ≤ 5 ppm       | < 3 ppm     |
| Trace Impurities – Iron (Fe)                            | ≤ 2.0 ppm     | < 0.1 ppm   |
| Trace Impurities – Lead (Pb)                            | ≤ 0.300 ppm   | < 0.040 ppm |
| Trace Impurities – Lithium (Li)                         | ≤ 0.100 ppm   | < 0.001 ppm |
| Trace Impurities – Magnesium (Mg)                       | ≤ 0.20 ppm    | < 0.03 ppm  |
| Trace Impurities – Manganese (Mn)                       | ≤ 0.100 ppm   | < 0.010 ppm |
| Trace Impurities – Nickel (Ni)                          | ≤ 0.200 ppm   | 0.050 ppm   |
| Trace Impurities – Potassium (K)                        | ≤ 1.500 ppm   | < 0.020 ppm |
| Trace Impurities – Sodium (Na)                          | ≤ 2.500 ppm   | 0.030 ppm   |
| Trace Impurities – Strontium (Sr)                       | ≤ 0.100 ppm   | < 0.005 ppm |
| Trace Impurities – Titanium (Ti)                        | ≤ 0.300 ppm   | 0.030 ppm   |
| Trace Impurities – Zinc (Zn)                            | ≤ 2.000 ppm   | < 0.040 ppm |

>>> Continued on page 2 >>>

Phosphoric Acid, 85%  
CMOS  
(orthophosphoric acid)



Material No.: 0264-05  
Batch No.: 23C2162015

| Test                                | Specification | Result   |
|-------------------------------------|---------------|----------|
| Particle Count – 1.0 µm and greater | ≤ 10 par/ml   | 4 par/ml |

For Microelectronic Use  
Storage Condition: Store at temperatures above 22°C (72°F)

Country of Origin: USA  
Packaging Site: Phillipsburg 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