

# Certificate of Analysis

Product Name:

Ammonium molybdate tetrahydrate - BioUltra, ≥99.0% (T)

Product Number: 09878

 $(\text{NH}_4)_6\text{Mo}_7\text{O}_{24} \cdot 4\text{H}_2\text{O}$ 

Batch Number: BCCH4160

Brand: SIGMA

CAS Number: 12054-85-2

Formula:  $\text{H}_{24}\text{Mo}_7\text{N}_6\text{O}_{24} \cdot 4\text{H}_2\text{O}$ 

Formula Weight: 1.235,86 g/mol

Quality Release Date: 25 MAR 2022

Recommended Retest Date: FEB 2028

| Test                                  | Specification      | Result     |
|---------------------------------------|--------------------|------------|
| Appearance (Color)                    | White to Off White | White      |
| Appearance (Form)                     | Powder or Crystals | Crystals   |
| Titration                             | 99.0 - 101.0 %     | 99.9 %     |
| n-Determination according to/kjeldahl |                    |            |
| Calcium (Ca)                          | ≤ 10 mg/kg         | < 10 mg/kg |
| (F-AAS)                               |                    |            |
| Cadmium (Cd)                          | ≤ 5 mg/kg          | < 5 mg/kg  |
| (F-AAS)                               |                    |            |
| Cobalt (Co)                           | ≤ 5 mg/kg          | < 5 mg/kg  |
| (F-AAS)                               |                    |            |
| Chromium (Cr)                         | ≤ 5 mg/kg          | < 5 mg/kg  |
| (F-AAS)                               |                    |            |
| Copper (Cu)                           | ≤ 5 mg/kg          | < 5 mg/kg  |
| (F-AAS)                               |                    |            |
| Iron (Fe)                             | ≤ 5 mg/kg          | < 5 mg/kg  |
| (F-AAS)                               |                    |            |
| Potassium (K)                         | ≤ 50 mg/kg         | < 50 mg/kg |
| (F-AAS)                               |                    |            |
| Magnesium (Mg)                        | ≤ 5 mg/kg          | < 5 mg/kg  |
| (F-AAS)                               |                    |            |
| Manganese (Mn)                        | ≤ 5 mg/kg          | < 5 mg/kg  |
| Sodium (Na)                           | ≤ 50 mg/kg         | < 50 mg/kg |
| (F-AAS)                               |                    |            |

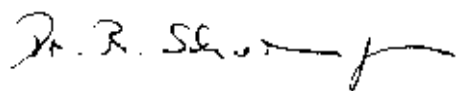
Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at [Sigma-Aldrich.com](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



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| Test                                                                                               | Specification               | Result      |
|----------------------------------------------------------------------------------------------------|-----------------------------|-------------|
| Nickel (Ni)<br>(F-AAS)                                                                             | ≤ 5 mg/kg                   | < 5 mg/kg   |
| Lead (Pb)<br>(F-AAS)                                                                               | ≤ 5 mg/kg                   | < 5 mg/kg   |
| Zinc (Zn)<br>(F-AAS)                                                                               | ≤ 5 mg/kg                   | < 5 mg/kg   |
| Chloride (Cl)                                                                                      | ≤ 10 mg/kg                  | < 10 mg/kg  |
| Nitrate (NO <sub>3</sub> )                                                                         | ≤ 20 mg/kg                  | < 20 mg/kg  |
| Sulfate (SO <sub>4</sub> )                                                                         | ≤ 100 mg/kg                 | < 100 mg/kg |
| Various Guarantee Label Test<br>Phosphate, Silicate, Arsenate (as PO <sub>4</sub> )<br>< = 10mg/kg | ≤ 10 mg/kg                  | < 10 mg/kg  |
| Appearance of solution<br>(Clear Colorless) 0.05 m in H <sub>2</sub> O                             | Corresponds to Requirements | Corresponds |
| PH of Solution (PH)<br>0.05 m in H <sub>2</sub> O                                                  | 4.0 - 5.5                   | 5.3         |
| Filtered<br>(No Residue on Filter Test)                                                            | No Residue                  | No Residue  |
| Cut-off                                                                                            | ≤ 360 nm                    | 356 nm      |



Dr. Reinhold Schwenninger  
Quality Assurance  
Buchs, Switzerland CH

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