



Chemistry for Safer, Sustainable Life

**BioFuran Materials LLC**  
920 William Pitt Way  
Pittsburgh, PA 15238  
412-376-7101

<https://www.biofuranchem.com>

## Magnesium acetate tetrahydrate Data Sheet

<b>Catalog sizes</b>	<b>100g</b> , Listed as 100g Magnesium acetate tetrahydrate, 100AC23 <b>500g</b> , Listed as 500g Magnesium acetate tetrahydrate, 500AC23 <b>1kg</b> , Listed as 1kg Magnesium acetate tetrahydrate, 1000AC23
<b>Category</b>	Acetate and formate Salts
<b>Product specification</b>	White crystalline, hygroscopic powder <ul style="list-style-type: none"><li>• Product ID : 100AC23</li><li>• Purity : 98%+</li><li>• CAS : 16674-78-5</li><li>• Molecular formula : C<sub>4</sub>H<sub>14</sub>MgO<sub>8</sub></li><li>• MW : 214.45g/mol</li><li>• MP : 78-82C</li><li>• Solubility : 1.0-1.3kg/L in water</li></ul>
<b>Product description</b>	Magnesium acetate tetrahydrate, Mg(CH <sub>3</sub> COO) <sub>2</sub> ·4H <sub>2</sub> O, is an ideal precursor for the synthesis of antimicrobial magnesium fluoride or oxide nanoparticles due to its exceptional solubility in water (1-1.3kg/L) and methanol (5.1-5.3kg/L). It is also routinely used as an intermediate, electrolyte, catalyst and analytical reagent in wet chemistry. In biochemical applications, Mg(CH <sub>3</sub> COO) <sub>2</sub> ·4H <sub>2</sub> O is used as source of magnesium ions as a precipitant in protein purification. Exemplary uses are summarized as follows: <ul style="list-style-type: none"><li>• Non-chloride salting out electrolyte</li><li>• MgF<sub>2</sub> nanoparticles precursor</li><li>• Negative staining ingredient</li><li>• Magnesium oxide precursor</li><li>• deicer, replacing corrosive chloride salts</li><li>• SO<sub>x</sub> and NO<sub>x</sub> absorbent</li><li>• Precursor for solvated supramolecules such as Mg(OAc)<sub>2</sub>·(H<sub>2</sub>O)<sub>3</sub>·(EtOH), Mg<sub>3</sub>(OAc)<sub>6</sub>·2EtOH, etc.</li></ul>