Sigma-Aldrich.

# 09978 Ammonium sulfate

**CAS number:** 7783-20-2

## **Product Description:**

Molecular Formula:	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>
Molecular Weight:	132.1 g/mol
pH:	5.0-6.0 (25°C, 1 M H <sub>2</sub> O)

This product is soluble in water (435 mg/ml, 3.29 M), yielding a clear, colorless solution. Ammonium sulfate saturation charts at 0 °and 25 °C have been reported.<sup>13</sup>

Store at Room Temperature

Trace elemental analyses have been performed on the Biochemika Ultra ammonium sulfate. The Certificate of Analysis provides lot-specific results. Biochemika Ultra ammonium sulfate is for applications which require tight control of elemental content.

### **Applications:**

Ammonium sulfate is a widely used reagent in molecular biology and chromatography. Applications include the precipitation and fractionation of proteins,<sup>1,14</sup> purification of antibodies,<sup>9,10</sup> crystallization of proteins,<sup>2,3,4,15</sup> protein-nucleic acid complexes,<sup>5</sup> and of nucleic acids.<sup>17</sup> Ammonium sulfate is also widely used in HPLC of proteins, such as in hydrophobic interaction chromatography.<sup>6,7,8</sup> It is also used for Sepharose chromatography of tRNAs using reverse salt gradients.<sup>16</sup>

The use of ammonium sulfate in long PCR buffer, in PCR lysis solution, and in second-strand cDNA synthesis has been reported.<sup>11</sup>

A protocol for the HPLC analysis of phospholipids using ammonium sulfate has been reported.<sup>12</sup>

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#### **Precautions and Disclaimer:**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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