Ammonium nitrate
Plant Cell Culture Tested

Product Number A3795
Store at Room Temperature

Product Description
Molecular Formula: NH₄NO₃
Molecular Weight: 80.04
CAS Number: 6484-52-2

This product is plant cell culture tested (0.6 mg/ml) and is appropriate for plant cell culture applications.

Ammonium nitrate is a reagent that is used in the manufacture of such products as fertilizers, matches, and nitrous oxide. It is utilized in the treatment of titanium ores. Ammonium nitrate is also an ammonia source in plant culture.

Ammonium nitrate has been used as a precipitant in the crystallization of the glycosylated inhibitor of cathepsin D and trypsin isolated from potato tubers. The use of ammonium nitrate in the analysis of binding chelators and their metal complexes by anion-exchange chromatography and inductively coupled plasma mass spectrometry has been studied. The effect of the concentration of various nutrients, including ammonium nitrate, on cell growth and production of nystatin by Streptomyces noursei has been investigated. The use of ammonium nitrate in the biotreatment of hydrocarbons-contaminated soils has been described.

A Fourier-transform infrared absorbance and transmittance study of ammonium nitrate in the 2-20 µm range has been published.

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.

Preparation Instructions
This product is soluble in water (100 mg/ml), yielding a clear, colorless solution. The pH of a 0.1 M solution of ammonium nitrate in water is 5.43.

References
1. The Merck Index, 12th ed., Entry# 567.