

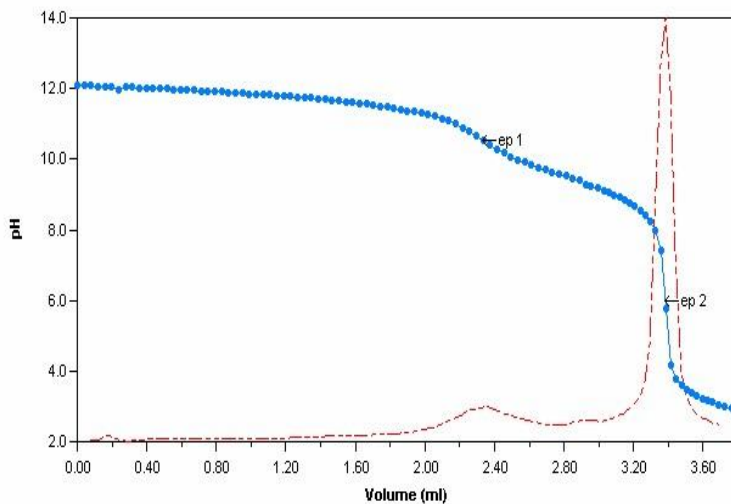
Method Abstract #64

Ammonia by pH Titration

Scope and Application This method determines the concentration of ammonia in water samples. It conforms to no known method.

Method Summary This method requires sodium hydroxide to be added to the sample to reach a pH of 12 to ensure that all ammonium is converted to ammonia. The sample is then titrated with sulfuric acid to a pH of 3.0. The concentration of ammonia is then calculated and reported.

Sample Titration Curve



Method Performance

Parameter	Specification
Measuring Range*	50 – 5000ppm
Method Detection Limit**	50ppm
RSD @ 50ppm	2.939% or +/- 1.47ppm
RSD @ 100ppm	1.104% or +/- 1.10ppm
RSD @ 500ppm	0.606% or +/- 3.03ppm
RSD @ 1000ppm	2.209% or +/- 22.1ppm

*This measuring range was determined by analyzing laboratory-prepared standards formulated from ammonium chloride. The measuring range may be increased by using larger-capacity analysis vessels and/or auto-dilution.

**The Method Detection Limit (MDL) was determined based on data obtaining a coefficient of variance better than 30%. Results may differ depending on laboratory practices and sample matrix.