

Method Number: TM 248

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**Method Summary****Determination of Ammoniacal Nitrogen as NH₄ in 2:1 soil extracts using the Kone Analyser****Scope and Range**

This method is used to determine the concentration of Ammoniacal nitrogen, expressed as NH₄, present in a 2:1 aqueous extract of soil using the Kone analysers.

The method is unvalidated and results may be reported as mg/kg or as g/l.

The LOD is taken from TM099 waters high scale method: <0.2 mg/l as N, so the reporting LOD for soils is <0.5mg/kg as NH₄, or <0.0003 g/l as NH₄

References

none

Principle

Preparation and Extraction:

10g of wet soil is weighed into a cup and 20ml of high purity deionised water added. The sample is shaken for one hour before filtering.

Analysis:

Ammonia reacts with hypochlorite ions, generated in situ by the alkaline hydrolysis of sodium dichloroisocyanurate, to produce monochloramine. Monochloramine then reacts with salicylate in the presence of sodium nitroprusside, to form the blue indosalicylate, the absorption of which is measured at 660 nm.

Results are expressed in mg/kg as NH₄ or in g/l as NH₄ depending on customer requirements.

Interferences

The presence of monochloramine, which may be present in chlorinated water and wastewater may interfere.

Extracted samples must be clear and virtually colourless as the analysis utilises spectrophotometry.