



Method Summary

Determination of Hexavalent Chromium in soils

Scope and Range

This method can be used to determine hexavalent chromium in soil and sewage sludge samples using the kone analyser; a discrete colorimetric analyser.

The method is accredited to ISO 17025 for soils and sewage sludges.

Detection limit: 0.6 mg/kg

Range: 0 - 10 mg/kg

Principle

Preparation and Extraction

Soils are extracted using a 10:1 ratio of as received soil to 0.2M NaOH. Highly coloured extractants are treated with activated carbon/charcoal to remove colouration.

Analysis

Hexavalent chromium reacts with diphenylcarbazide in acid solution to produce a red/violet coloured complex which is read photometrically at 540nm.

Interferences

None known.