



## **Method Summary**

### **Determination of Electrical Conductivity**

#### **Scope and Range**

Electrical conductivity is the numerical expression of the ability of an aqueous solution to carry an electrical current.

This method is ISO 17025 accredited for ground waters, treated and untreated sewages, trade effluents, land fill leachate, surface waters, saline and potable water (non-regulatory)

Results are expressed in mS/cm @ 200C.

Detection limit for unfiltered and filtered samples 0.02mS/cm

Working range 0.02 - 101 mS/cm @ 200C.

#### **References**

Standard Methods for the examination of waters and wastewaters 20<sup>th</sup> Edition, PHA, Washington DC, USA. ISBN 0-87553-131-8.

The measurement of Electrical Conductivity and the Laboratory Determination of the pH value of Natural, Treated and Waste Waters. HMSO, 1978. ISBN 011 751428 4.

#### **Principle**

The sample is shaken well before analysis.

Filtered Electrical conductivity samples are prepared by the Preparation laboratory using a 0.45µm filter.

The electrical conductivity meter is calibrated, the probe is placed into the sample and the result read directly from the meter.

#### **Interferences**

Samples of low ionic strength may exhibit erratic conductivity readings due to exchange of carbon dioxide and other gasses with the atmosphere.