Method Summary

Determination of Loss on Ignition in Soils

Scope and Range

This method estimates the amount of organic matter in a soil or solid.
The method is accredited to ISO 17025 and MCERTS for sand, loam and clay matrices

Range	0.70 - 100 % w/w
Limit of detection	0.70 %

References

BS 1377 Part 3 1990

Principle

The sample is ashed in a furnace at 450 ± 25°C and the organic matter content is estimated from the loss in weight.

Samples are stored in the cold store at 1-8°C prior to analysis.
Soil samples should be collected in dry, sealable containers.
1g of a dried and crushed sample is accurately weighed into a pre-weighed crucible.
The crucible is placed in a furnace at 450°C for 4 hours. After cooling, the crucible is re-weighed.
The Loss on Ignition is calculated from these weighings. The result is expressed on a 'dry soil basis'.

An AQC standard is run every 20 samples.

Interferences

The loss on ignition will also include any free sulphur present in the sample and losses due to the generation of carbon dioxide from limestone.