Method Number: TM 261 Updated: 17/07/2022 Issue Number: 02

Page 1 of 1



Method Summary

Determination of True and Apparent Colour by Spectrophotometry

Scope and Range

The method is used to determine and differentiate the apparent (unfiltered) and true (filtered) colour of water samples. This method is applicable to all waters. The calibrated range for this method is 1-100mg/l.

<u>References</u>

Colour and Turbidity of Waters, Methods for the Examination of Waters and Associated Materials, HMSO, 1981, ISBN 0 11 7519553.

BS EN ISO 5667-3:2003 - Water Quality- Sampling - Part 3:Guidance on the preservation and handling of water samples (BS6068-6.3:2003).

Principle

The colour of water can be affected by the turbidity of the sample. This method measures the colour before and after filtration, to assess this effect. The absorption of the samples is measured at 400nm and is expressed as mg/l Pt/Co, after comparison to a platinum/cobalt complex mixture of known concentration. The true colour is described as the colour due to dissolved substances. This is the colour of the filtered sample. The samples are filtered through a 0.45µm cellulose acetate filter. The apparent colour is described as the colour due to dissolved substances, particulates and any colloidal matter in the unfiltered sample.

Interferences

None known.