

# COLOUR

## TEST FOR COLOUR IN NATURAL AND TREATED WATERS

### Photometer Method

### AUTOMATIC WAVELENGTH SELECTION

**10 – 500 mg/l Pt**  
**(10 – 500 mg/l Hazen Units)**

Pure water exhibits a light blue colour when viewed in depth. This colour may be modified by the presence of organic material, typically to a yellow or brown colour. An estimate of this colour intensity is used as a simple means of monitoring natural and treated water.

### Method

The colour of the water is determined photoelectrically using the Palintest Photometer. The sample should be filtered to remove suspended solids before analysis to determine the 'true colour' due to dissolved matter.

The colour of water is expressed using the platinum/cobalt colour scale (Pt/Co scale). Each unit is equivalent to the colour produced by 1 mg/l platinum in the form of chloroplatinic acid in the presence of 2 mg/l cobaltous chloride hexahydrate. These units are identical with 'Hazen' units, which have been traditionally used to express results from the visual estimation of water colour.

### Reagents and Equipment

Palintest Colour/Turbidity Set (PM 269)

Palintest Automatic Wavelength Selection Photometer

### Test Procedure

- 1 Filter sample through a GF/B filter paper.
- 2 Fill a test tube with filtered sample to the 10 ml mark.
- 3 Fill a test tube with deionised water to the 10 ml mark and retain for use as the BLANK tube.
- 4 Select Phot 47 on photometer.
- 5 Take photometer reading in usual manner (see photometer instructions) using the deionised water as the blank.
- 6 The result is displayed as mg/l Pt.

### Note

Samples, which contain metallic impurities, dyestuffs or other industrial pollutants, may exhibit a different colour to the natural yellow-brown coloration. This test may not be suitable for samples of this type.