

# CYANURIC ACID

Photometer Method

## TEST FOR CYANURIC ACID IN SWIMMING POOL WATER

**AUTOMATIC  
WAVELENGTH  
SELECTION**

**0 – 200 mg/l**

Cyanuric acid is extensively used as a chlorine stabiliser in swimming pool water. Cyanuric acid itself may be added to the water when the pool is first filled, or may be introduced gradually through the use of chloroisocyanurate based chlorine donors. Swimming pool water treatment instructions generally recommend a cyanuric acid level within the range 30 - 200 mg/l. In some countries a lower maximum level is recommended. The Palintest Cyanuric Acid test provides a simple method of measuring cyanuric acid level over the range 0 - 200 mg/l.

### Method

The Palintest Cyanuric Acid test is based on a single tablet reagent containing melamine and a buffer. Cyanuric acid reacts with melamine in buffered solution to form an insoluble complex. At the cyanuric acid levels encountered in pool water, this is observed as turbidity in the test sample. The degree of turbidity is proportional to the cyanuric acid concentration and is measured using a Palintest Photometer.

### Reagents and Equipment

Palintest Cyanuric Acid Tablets  
Palintest Automatic Wavelength Selection Photometer  
Round Test Tubes, 10 ml glass (PT 595)  
Palintest Dilution Tube (PT 512)

### Test Procedure

- 1 Fill test tube with sample to the 10 ml mark.
- 2 Add one Cyanuric Acid tablet and allow to disintegrate for at least two minutes. A cloudy solution indicates the presence of cyanuric acid.
- 3 Crush any remaining undissolved tablet and mix to ensure uniformity.
- 4 Select Phot 13 on Photometer.
- 5 Take Photometer reading in usual manner (see Photometer instructions).
- 6 The result is displayed as mg/l.

**Note**

The range of the test is 0 - 200 mg/l. However when a test result of 100 mg/l or over is obtained, the following dilution technique is recommended in order to obtain a more precise result.

- 1 Take a sample of pool water in a Palintest Dilution Tube (PT 512), filling to the x10 mark.
  - 2 Make up to the 'Deionised Water' mark with deionised water, or tap water, and mix.
  - 3 Fill a round test tube with diluted sample to the 10 ml mark. Test as per the earlier test procedure.
  - 4 Multiply the displayed result by 10 to obtain the cyanuric acid concentration.
-