

# NITRITE (NITRICOL)

## TEST FOR NITRITE IN NATURAL, DRINKING AND WASTE WATERS

### Photometer Method

### AUTOMATIC WAVELENGTH SELECTION

**0 – 0.5 mg/l N**  
**(0 – 1.6 mg/l NO<sub>2</sub>)**

Nitrites are found in natural waters as an intermediate product in the nitrogen cycle. Nitrite is harmful to fish and other forms of aquatic life and the nitrite level must be carefully controlled in water used for fish farms and aquariums. The nitrite test is also applied for pollution control in waste waters, and for the monitoring of drinking water.

The Palintest Nitricol test provides a simple method of measuring Nitrite Nitrogen levels over the range 0 - 0.5 mg/l N. Higher levels can be determined by diluting the sample.

### Method

Nitrites in acid solution react with sulphanilic acid. The resulting diazo compound couples with N-(1-naphthyl)-ethylene diamine to form a reddish dye. The Palintest Nitricol method features a single tablet reagent containing both of these reagents in an acidic formulation. The test is simply carried out by adding a tablet to a sample of the water under test.

The intensity of the colour produced in the test is proportional to the nitrite concentration and is measured using a Palintest Photometer.

### Reagents and Equipment

Palintest Nitricol Tablets

Palintest Automatic Wavelength Selection Photometer

Round Test Tubes, 10 ml glass (PT 595)

### Test Procedure

- 1 Fill round test tube with sample to the 10 ml mark.
- 2 Add one Nitricol tablet, crush and mix to dissolve.
- 3 Stand for 10 minutes to allow full colour development.
- 4 Select Phot 24 on Photometer for result as mg/l N, or Phot 64 for result as mg/l NO<sub>2</sub>.
- 5 Take Photometer reading in usual manner (see Photometer instructions).  
To convert from mg/l N to mg/l NO<sub>2</sub> multiply result by 3.3.