TABLET COUNT TESTS

INSTRUCTIONS FOR USING THE PALINTEST TABLET COUNT METHOD OF WATER ANALYSIS

The Palintest Tablet Count method provides an extremely easy means of analysis for an important range of water parameters. The tests are carried out simply by taking a measured volume of water and adding tablets one at a time until a prescribed colour change takes place. The result of the test is given by the number of tablets used in relation to the volume of water taken.

Test Reagents

The test tablets used in tablet count procedures contain accurately standardised titration reagents combined with specific colour indicators. In certain tests a conditioning tablet is first used to provide the correct conditions for the test. Test instructions for the individual tests indicate the test reagents required and the method of use.

Equipment Needed

The only equipment needed to carry out tablet count tests is a suitable container for the water sample. Palintest Tablet Count tests are variously based on a 10 ml, 50 ml, 100 ml or 200 ml sample size. The following sample containers are available for carrying out tablet count tests:-

- PT 505 Sample Container 200/100/50 ml, glass bottle
- PT 510 Sample Container 100/50/10 ml, plastic tube
- PT 506 Sample Container 50/10 ml, plastic tube
- PT 519 Sample Container 50/10 ml, plastic bottle
- PT218 Tablet Count Module. Contains one PT 510 Sample Container 100/50/10 ml and one PT 369 Measuring Syringe 10 ml. The latter enables small samples to be measured out accurately.

Test Range/Sample Size

In tablet count tests, the test range depends on the sample size taken. The larger the sample size, the lower the concentration that can be measured. Similarly the smaller the sample size, the higher the test range. The sample sizes recommended in individual test instructions are those which are most appropriate to the test ranges likely to be encountered in practice.

The maximum concentration that can be measured for each sample size is governed by the number of tablets which can be conveniently added to the water sample. The most accurate result is achieved when a tablet count of between 4 and 12 tablets is obtained. When the tablet count falls outside this number it is recommended that a larger or smaller sample be taken as appropriate to bring the tablet count within this range.

When using small samples of 10 ml or less it is desirable, once the sample has been measured out, to increase the working volume of the solution by adding deionised water (approximately 40 ml) to the sample container. This is merely to aid the dissolving of the tablets and observation of the colour change. It does not effect the calculation of the test result.

Calculation of Result

The test result depends on the number of count tablets used in relation to the sample size taken. Individual test instructions give the method of calculating the test result for different sample sizes for that test.

V1-12/03