

## Detecting phosphate and nitrate levels in CROWD rivers

### Phosphate

The low range kit covering 0-2500ppb is required. The link below provides a purchase site in the UK.

[La Motte Insta Phosphate Test Strips For Hot Tubs & Swimming Pools \(happyhottubs.co.uk\)](http://happyhottubs.co.uk). The cost is £17.99 for 25 single use strips including a reading tube and a syringe. They are very easy to use. La Motte is a well-established company based in USA. The sensitivity of this test may be insufficient to be precise at low levels of phosphate but adequate to detect concentrations of possible concern. The same limitation also applies to the tests for nitrate considered below.

Do not buy any high range version as this likely to be too insensitive for the levels normally found in rivers (c100ppb or more). The level in the upper reaches of the Asker is between 100-300ppb. These levels are those expected for a chalk stream.

A second source of similar tests to both phosphate and nitrate is recommended by the Freshwater Habitats Trust <https://freshwaterhabitats.org.uk/projects/clean-water/kit/>. They use kits obtained from a Japanese company (Kyoritsu).

Government data suggests c40% of rivers in the South -West had >0.1mg/L phosphate in 2009 (i.e. >100ppb). [defra-stats-observatory-indicators-da3-120224.pdf](https://defra-stats-observatory-indicators-da3-120224.pdf) ([publishing.service.gov.uk](http://publishing.service.gov.uk))

### Nitrate

Government data suggests c40% of rivers in the South -West had 30mg/L (i.e. 30ppm or 30,000ppb) in 2009 (reference above). The strips I use cover 0-500ppm Nitrite and 0-25ppm nitrite. The upper Asker has less than 10ppm nitrate and undetectable levels of nitrite. My supplier was Simplex Heath. The cost on Amazon is £14.99 for 50 single use strips that record both nitrate and nitrite. They are very easy to use. A strip is dipped into the water for 2-3 seconds and then colour judged 30 seconds after removing the strip from the water.

[SimplexHealth Nitrate 0-500 & Nitrite 0-25 Tests Water Test Strips \(50 strips\) : Amazon.co.uk: Pet Supplies](https://www.amazon.co.uk/SimplexHealth-Nitrate-0-500-Nitrite-0-25-Tests-Water-Test-Strips-50-strips/dp/B000000000)

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