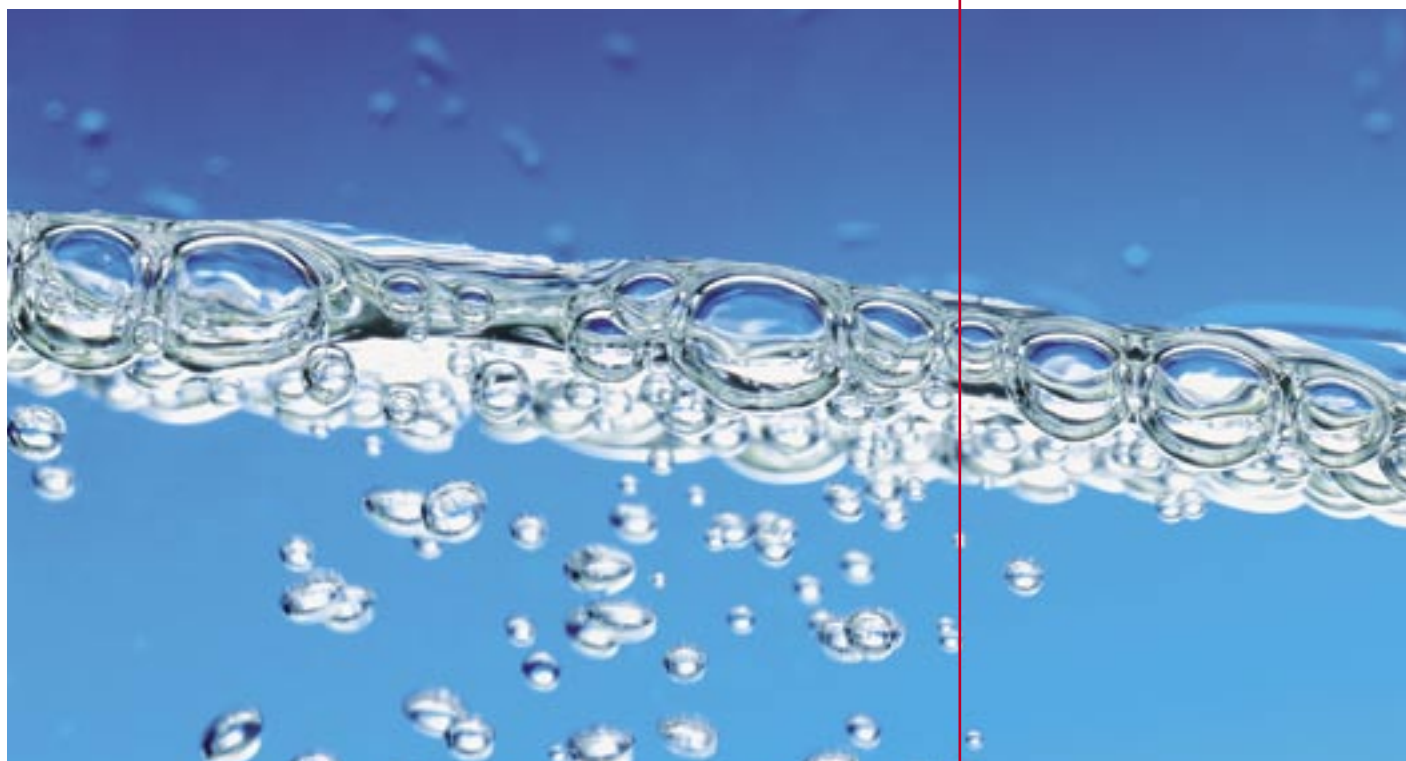


Analytix *LabInfo*



AQUANAL®-professional ready to use tube tests

AQUANAL®-professional Tube Tests were developed to provide a fast safe and clean method to perform water analysis in sewage treatment plants. The sample is pipetted into a tube that contains the test reagent. For some tests, an additional reagent is required that has to be added manually. The COD test comes in ready to use solutions. After a specified reaction time, the result can be determined with any of our photometers AQUANAL®-SPECTRO 3, SPECTRO CSB / COD (for COD tube tests only) or AQUANAL®-professional SPECTRO 1000. As with all of the AQUANAL® products, complete, easy-to-follow instructions are provided with every test.

How it works

A pipette is used to dispense the sample into the tube containing the test reagent. For some tests, an additional reagent has to be added. Once the reaction is over, the results may be obtained by comparison to a color chart or with one of the AQUANAL® Photometers.

Available Tube Tests

Ammonia

Ammonia occurs in many forms of surface water and is found in communal or industrial waste water as well. The test determines the ammonia concentration. Using a conversion factor the concentration of ammonium nitrogen can be calculated.

Chemical oxygen demand – COD

The COD value is a measurement factor for mainly organic pollutants found in water. The COD value is determined by oxidising the substances with potassium dichromate under certain conditions. The evaluation can be done using either the Spectro 3, the Spectro CSB/COD photometer or Spectro 1000.

A heating unit (Cat. No. 37571), required to produce the necessary decomposition, is also available.

Nitrate

Due to the high load of nitrates in the environment (NO_x from the air, fertilizers), relatively high nitrate concentrations can be also measured in potable water. Nitrate is microbiologically transformed to nitrite, which is an indicator for the pollution of a water body.

Nitrite

Nitrite is produced during the nitrification of ammonia into nitrate as an intermediate product, principally in low-oxygen water. Nitrite can be toxic for organisms even in low concentrations. The test determines the concentration of nitrite; a factor is then used to calculate the concentration of nitrite nitrogen.

Phosphate - Total and Ortho

Phosphorus compounds are found in waste water in various forms, one being orthophosphate, occurring as phosphates, which can be determined in water without prior decomposition reactions or as organic and inorganic phosphate compounds which are known collectively as total phosphate after decomposition. All of these substances should be included in the study of process water. The tests cover the concentrations of phosphate, then a factor is used to calculate the concentration of phosphorus.

Total Nitrogen

Total nitrogen is a measure of all the various forms of nitrogen that are found in a water sample. These compounds are important in terms of water economy and waste water technology. Depending on conditions prevailing (i.e. low or high oxygen), their concentrations fluctuate. Total Nitrogen is also determined effect of check the influence of pH-value or oxygen concentration. The result of this test can be obtained by using Spectro 1000 or Spectro 3 Photometer.

Ready-to-use Solutions for Waste Water Analysis

Ready to use solutions for waste water analysis according to German Standard Methods are listed by chemical name in the alphabetical part of our catalog (e.g., mercury(II) sulfate solution, Cat. No. 31014).

Reagent Composition

Mercuric sulfate solution in sulfuric acid / potassium dichromate

20 g / L mercury sulfate, 1.5 g / L potassium dichromate (Cat. No. 34621)

80 g / L mercury sulfate, 5.9 g / L potassium dichromate (Cat. No. 34632)

200 g / L mercury sulfate, 14.8 g / L potassium dichromate (Cat. No. 34624)

Silver sulfate solution in sulfuric acid: 10 g / L (Cat. No. 34629),

26.6 g / L (Cat. No. 34634), 60 g / L (Cat. No. 34635) or

80 g / L silver sulfate (Cat. No. 34631)

Potassium dichromate solution: 0.02 M potassium dichromate (Cat. No. 34631)

Cat. No.	Product	Description
70107	Nitrate tube test	Range: 0.5-60 mg/L, 25 tests
70108	Total Nitrogen tube test	Range: 0.5-140 mg/L, 25 tests
37739	Ammonium tube test	Range: 0.01 - 50 mg/L, 25 tests
37735	COD tube test	Range: 2-40 mg / L, 150 tests
37736	COD tube test	Range: 10-150 mg/L, 25 or 150 tests
37737	COD tube test	Range: 100-1500 mg/L, 25 or 150 tests
37738	COD tube test	Range: 1000-15000 mg/L, 25 or 150 tests
37741	Nitrite tube test	Range: 0.1-10 mg/L, 25 tests
37743	Total Phosphate tube test	Range: 0.2-10 mg/L, 25 tests
37744	Total Phosphate tube test	Range: 5.0-60 mg/L, 25 tests
37745	Ortho-Phosphate tube test	Range: 3.0-60 mg/L, 25 tests
37570	Spectro COD	For COD tube tests
37571	Heating unit	For AQUANAL®-professional tube tests
70403	AQUANAL®-Spectro 3 Photometer	
70012	AQUANAL®-professional Spectro 1000	

Table AQUANAL®-professional Tube Tests Product List

Ordering information

Should you have questions regarding the AQUANAL® tube tests or any of the other AQUANAL® products please E-mail us at aquanal@sial.com or contact:

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Product Management

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Petra Haubold

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