# MR 2 - 20 mg/L PO<sub>4</sub>-P / 6 - 60 mg/L PO<sub>4</sub>

DOC312.53.94349

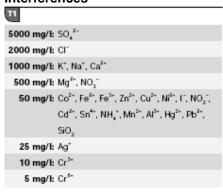
#### **Principle**

Phosphate ions react with molybdate and antimony ions in an acidic solution to from an antimonyl phosphomolybdate complex, which is reduced by ascorbic acid to phosphormolybdenum blue

#### Range of Application

Waste water, drinking water, boiler water, surface water, process analysis

#### Interferences



The ions listed in T1 have been individually checked up to the given concentrations and do not cause interference. We have not determined cumulative effects and the influence of other ions. The measurement results must be subjected to plausibility checks (dilute and/or spike the sample).

Sample Volume 0,4 mL
Reagent B Volume 0,5 mL
Reagent C Volume 0,2 mL
Reagent B Filling 60 mL
Reagent C Filling 30 mL
Reagent D Filling 12 q

Digestion Temperature/Time 120°C/30 min. or 110°C/60 min.

Temperature Sample/sample cuvette 15 – 25°C pH sample 2 – 10

AP3900 multi with HT-Module can also use:

Digestion Temperature/Time 170°C/15 min.

## Please note:

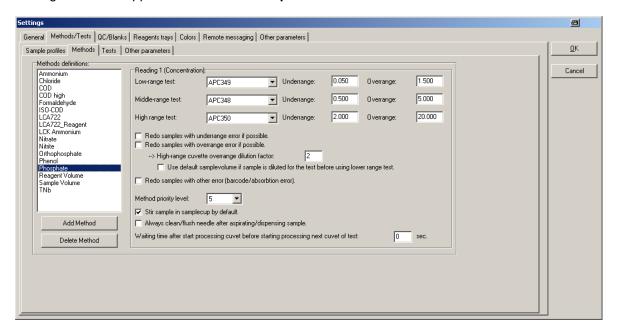
With AP3900 Software Version 1.0.7.5 or higher a digestion temperature of 120°C is possible to be chosen.

So the tests for TP (APC348 / APC349 / APC350) can be run at  $120^{\circ}$ C/30 min. to save time and to have identical time and temperature as manual handling with LCK348 / LCK349 / LCK350.

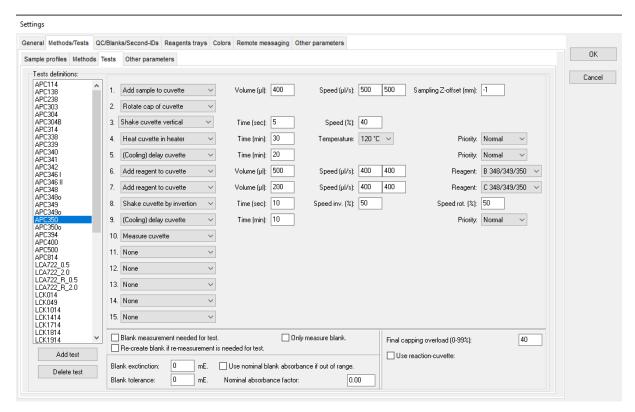
There is no change in the quality of the results by switching from 110°C/60 min. to 120°C/30min. procedure. There is no calibration update needed.

#### **Method Library:**

APC350 total is pre-programmed in the method library. Please check under Settings/Software/Application/Methods **Phosphate** and Tests **APC350**.



## Example: Setting 120°C / 30 min.

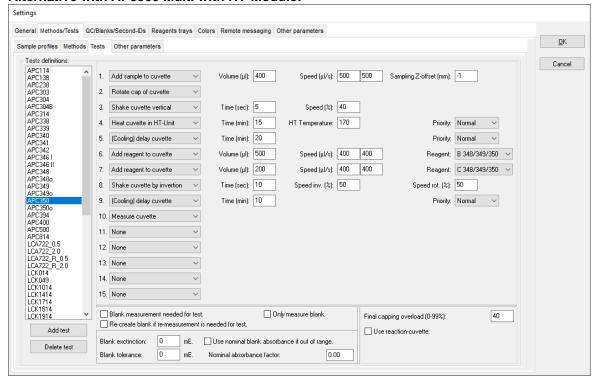


#### Note

The APC350 total needs a preparation of Reagent C:

Use the delivered spoon and take 2 spoonful of Reagent D into Solution C. Invert it for approximately 30 seconds (until it`s solved). This solution is stable for 5 days at room temperature.

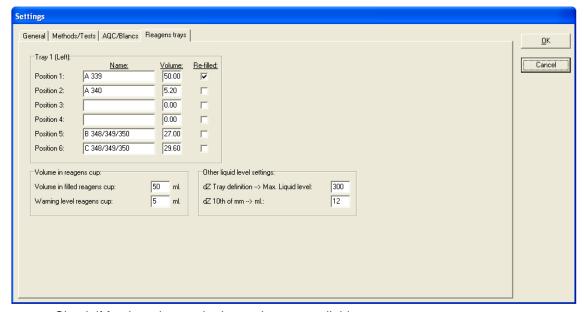
### Alternative with AP3900 Multi with HT-Module:



## Run the APC350 total Phosphorous method

Create a Run like described in the QUICK GUIDE

- Place the APC350 cuvettes according to the settings in the Software in the cuvette racks.
- Place the samples according to the settings in the Software in the sample racks
- Place the Reagent B and C according to the settings in the Reagent trays



- Check if fresh and enough pipette tips are available
- Check if enough Rinsing/Dilution water is available
- Initialize the AP 3900 multi and the Dispenser

