

P/A KITS IN 100 g STERILE BOTTLES

The P / A (Presence / Absence) method was invented in the Second World War so that the soldiers did not die for drinking contaminated water. Since 1990, MICROKIT has developed chromogenic P / A kits for control of the 16 microorganisms most sought in waters. These kits not only they triumph around the world thanks to the NGOs that work in the improvement of drinking water in tropical countries, but which are also recognized as the most reliable method, according to its numerous validations and participations in proficiency test services. They can be used in work field and in the laboratory, and save both the work of membrane filtration (MF) or NMP, as its cost.



With them you can say the sample to the incubator in only 10 seconds!

Simply add to the 100 (or 250 ml) sample of water the sterile medium suitable for the microorganism that is sought; incubate; and the next day, if it has not changed color, it shows the absence of the pathogen (without false negatives) and if it has changed to the indicated color, its presence. As simple as that. And more effective than any other method. Because the P / A method does not stress the microorganisms as it happens with the MF, which obtains very poor recoveries.

European legislation (EU Directive 7-10-2015) requires the counting of *E. coli* (and other coliforms), Fecal Enterococci, *Pseudomonas aeruginosa* and *Clostridium perfringens* and their spores in waters of human consumption to show that there is not a single cell in 100 ml; and in bottled waters, the counting of the same parameters (Clostridia can be sulfite-reducing or *C. perfringens*) to show that there is not a single cell in 250 ml. Since more than 99.99% of the samples that you. Analyzes, are exempt from these microorganisms, now you are spending huge amounts of time and money in "count zeros". Change to the P / A method and all absences must be reported as "zero", since there are no decimal cells, so in microbiology, "absence" is exactly the same (equivalent) to "zero". And only when you have a presence, repeat the analysis by MF with another sample of the same point and report the count you get. In this the simple way of "negative screening", you will save huge amounts of time and money, but also, it will increase the reliability of your analysis, since the P / A method detects numerous presences that the MF method finds as "zero", as dangerous false negative: It is accepted in the international bibliography that about 21% of the waters that contain coliforms-*E.coli*, about 6% of the waters containing faecal Enterococci, about 49% of the waters that contain Clostridia (being strict anaerobes) and about 33% of waters containing *Pseudomonas aeruginosa*, are not detected as positive by the MF method, but they are detected with the P / A method!



In this new presentation, the costs are reduced to the minimum:

100 g bottles of sterile powder with sterile spoon references:

- DMTI900-** for *E.coli* and other coliforms
- DMTI901-** for Fecal Enterococci
- DMTI902-** for Clostridia
- DMTI908-** for *Pseudomonas aeruginosa*
- DMTI904-** for *Burkholderia cepacia*.

With 3 years of expiration!

HOW TO USE:

1. Open the boat every time you use it, in the cabin or next to a Bunsen, extract with the spoon sterilized (or submerged in alcohol and after allowing it to dry) the volume of medium indicated in label, and close the pot immediately to avoid contamination. Although it is difficult for this happens, since none of the microorganisms involved inhabit the air. Use sterile gloves when handled, so as not to contaminate the rest of the inner dust of possible cells still viable that could carry in your hands. It is not necessary to be flush or to be very strict in the volume of medium added, since the medium works perfectly even half and twice the indicated concentration (since they are only nutrient broths with differential chromogens). If the water is chlorinated, add the corresponding sodium thiosulfate to neutralize it.
2. Mix without shaking, incubate at 35-37°C and look at the next day if there is a change in color:
 - DMT1900- for *E.coli*: blue fluorescent water under 366 nm UVA light (MICROKIT VMT050 flashlight) and other coliforms: blue-green water.
 - DMT1901- for faecal *Enterococci*: black water, opaque
 - DMT1902- for Clostridia: black water, or black bottom
 - DMT1908- for *Pseudomonas aeruginosa*: pink and fluorescent water (blue-green-yellowish) under 366 nm UVA light (MICROKIT VMT050 flashlight)
 - DMT1904- for *Burkholderia cepacia* in pharmaceutical and cosmetic waters to comply more efficiently with FDA / Public Health inspections: red wine water, opaque
3. If positive, make adequate confirmation tests: oxidase (-) for coliforms, indole (+) for *E.coli*; cocci in chains, negative catalase for fecal *Enterococci*; streaking in TSC-MUP Agar with fluorescent colonies under 366 nm UVA light (MICROKIT VMT050 flashlight) for *Clostridium perfringens*; streaking in Cetrimide Agar and use of M-Ident-PS for *Pseudomonas aeruginosa*. If not, declare with maximum reliability the sample as absent from these pathogens / indicators in 100 (or 250 mL) of water sample.

Versatility of receptacles that can be used:



Water with *E.coli*-Coliforms (blue-green), example in bags



Faecal *Enterococci* (black, opaque), example in a MICROKIT bottle



Pseudomonas aeruginosa (pink, more intense the longer incubated), respectively, example in Pyrex type bottles



Clostridium perfringens (black or black bottom), example in boats of urinary sampling.



Burkholderia cepacia, red wine, opaque, example in a MICROKIT bottle

ORDER NOW FOR THE MOST SENSITIVE METHOD IN THE MOST ECONOMIC FORMAT (<1 € / TEST)