

MICROBMONITOR[®] AQUA[™]



What is the MicrobMonitor AQUA test?

The **MicrobMonitor AQUA** test is a simple, easy to use test kit for quantitative detection of bacteria that can contaminate water. This is known as the Heterotrophic Plate Count (HPC), also called the Total Viable Count (TVC) or the Aerobic Colony Count (ACC). **MicrobMonitor AQUA** uses the same principles as standard laboratory methods for HPC but it can be performed on-board and on-site including in remote locations with no access to laboratory facilities.

Each test consists of a screw capped bottle containing a thixotropic, nutritive culture gel. The required volume of sample (usually 0.1 ml) is added to the test bottle using a sterile measuring pipette and is then dispersed in the gel by shaking. The gel then re-sets and the test bottle is incubated under specific conditions of temperature and time, according to the type of sample and the assessment required. Bacteria in the sample reproduce to form 'colonies' which appear as purple spots in the gel.

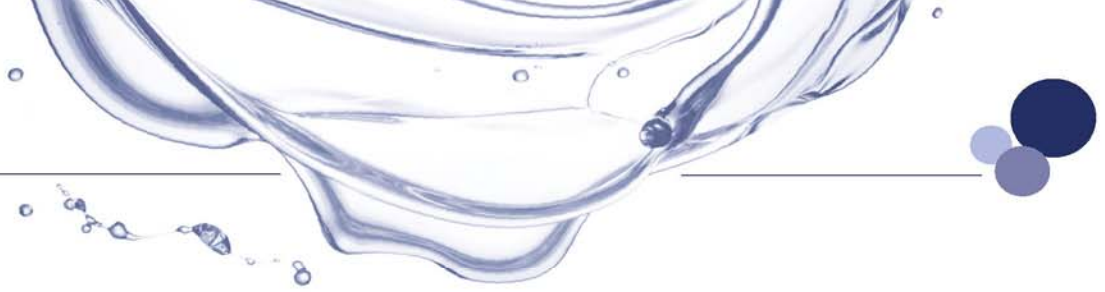
The number of colonies is counted or estimated and is equivalent to the number of bacterial colony forming units (CFU) present in the volume of sample tested. The number of colonies counted is divided by the volume of sample tested to give the Heterotrophic Plate Count as number of CFU per ml.

MicrobMonitor AQUA is available in packs of 1 and 10 tests each containing everything that is required to perform the test.

What is the MicrobMonitor AQUA test used for?

Various regulatory and industry specific guidance specifies the use of HPC in monitoring water quality. The number of bacteria present in a water sample, as indicated by the HPC, can provide an overall indication of the microbiological cleanliness of potable and recreational water systems. HPC can be used as an operational indicator of the effectiveness of water disinfection. HPC can also be used to determine trends. An increase in HPC during water distribution or with time indicates post treatment contamination or re-growth of microorganisms within the water distribution system due to insufficient residual disinfectant.

A sudden increase in HPC above historical baseline values should trigger actions to investigate and if necessary remediate the situation, for example by hyperchlorination. Increases of HPC at 36 or 37 °C can provide an early indication of contamination by bacteria which may potentially pose a health hazard.



Who can use the MicrobMonitor AQUA test?

ANYONE - No special skills or equipment are needed.

Tests for hazardous microorganisms and indicators of faecal pollution (e.g. *E. coli*) should only be conducted by suitably trained personnel in an appropriate facility. However, **MicrobMonitor AQUA** does not specifically culture hazardous microorganisms and because the test is fully contained, it is safe to use on board ships, offshore facilities and in locations which are distant from a suitable laboratory. The procedure is very simple with no complex sample manipulations, such as dilution or filtration.

What are the MicrobMonitor AQUA tests advantages?

- Simple, quick and easy to use.
- Can be used in the field, on-site and on-board.
- Safe—no exposure to hazardous microbial cultures
- Flexible—works with any water sample.
- Quantitative, indicates the severity of contamination not just the presence of microbes as with “go, no-go” tests.
- Can be used to monitor trends of contamination.
- Wide range of detection down to 1 CFU /ml enables testing for compliance with most stringent HPC limits.
- Contamination limits and detection levels can be user defined for specific facilities and operations.
- More cost effective than standard laboratory tests.

What samples can I test?

The test can be used to test samples from;

- Potable water
- Hot water systems
- Recreational water facilities such as swimming pools and spa baths.
- Raw environmental water and other waters.

What about Support?

MicrobMonitor AQUA tests are supplied and supported by ECHA Microbiology Ltd, a world leader in providing solutions for microbial contamination in industry. ECHA provide consultancy, training and laboratory services for development of safe, compliant and cost effective solutions for control of microbial contamination.

For more information on how to order this product, please contact a member of our Sales Team using any of the details below. You can also find more information on our website.

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