

MODERNWATER

QuickChek™ SRB

Rapid, Accurate, Reliable

Modern Water's QuickChek™ SRB works on the principle of immunoassay. This novel and proven technology overcomes many of the limitations of conventional culture and serial dilution methods that are frequently used to detect SRB.

■ High level of accuracy

The QuickChek SRB kit detects the presence of APS-Reductase present in all strains of SRB. This enables the detection of all viable and nonviable SRB in a sample. Modern Water's QuickChek technology can distinguish between sulfide producing bacteria and sulfate reducing bacteria, whereas culture and serial dilution tests do not always detect certain strains of SRB.

■ Interference-Free

The QuickChek SRB detection system is not affected by sample salinity, temperature, sulfide content or common oil field chemicals. Serial dilution bottle tests can often generate false positive results if hydrogen sulfide exceeds 20 ppm.



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■ Rapid results

The immunoassay method determines SRB populations in 15 to 20 minutes – a far shorter period than serial dilution bottles that can take up to 28 days to generate results. It has been shown that bacteria in stagnant or slow moving water form a biofilm on the surface of the metal under which the corrosion processes can run up to 100 times faster than normal corrosion. The rapid results of the QuickChek SRB kit allows remediation efforts to start faster resulting in lower maintenance and repair costs. The QuickChek SRB kit can also be used to measure the effectiveness of biocides or other remediation approaches.



■ Enhanced Detection Methods

The QuickChek method has a standard detection limit of 10^3 SRB cells/ml. The detection limit for “clean” waters can be lowered to 10^2 or 10^1 by using a larger sample volume.

■ Application for Solid Samples

Solid samples or fluid samples, can be analyzed quickly even though they contain high levels of suspended solids and are difficult to analyze using serial dilution or culture test methods. The chemical lysing agent in the QuickChek detection system penetrates solid particles to release the target enzyme, APS Reductase from a solid mass. This enables the quantification of SRB in biofilms, sediment, rust, sludge or mud. This added capability is especially important when testing tank bottoms for SRB.

■ Simple to Run

The QuickChek test was designed in conjunction with a leading international oil and gas company to be simple and easy to use. The kit does not use syringes because there is no need for serial dilution. QuickChek SRB does not require pretreatment of the samples and also eliminates the need for refrigeration for up to 7-28 days, as required by the serial dilution method.

■ Proven Technology

APS reductase measurement technology is an internationally recognized method for rapid assessment of SRB bacteria.

■ Completely self-contained and disposable.

The QuickChek test kit is designed for point of use analysis. The kit is lightweight, non-toxic and easily disposable.



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