QuickChek® SRB

Rapid Detection of Sulphate Reducing Bacteria (SRB).

MODERN WATER

A Metir plc Trading Company

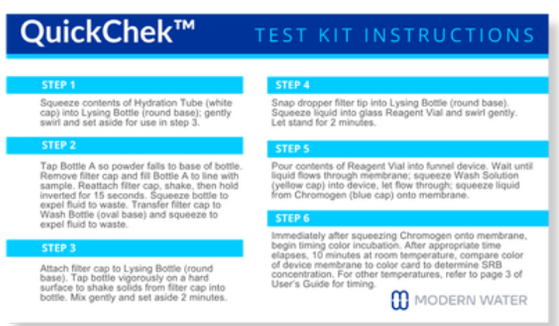
QuickChek® SRB

Fast. Accurate. Reliable.

Microbiologically Induced Corrosion (MIC) costs industries billions every year through equipment failure, reduced efficiency and unplanned downtime.

The QuickChek® SRB Detection System provides rapid on-site identification of Sulphate Reducing Bacteria (SRB), delivering results in as little as 20 minutes compared to days or even weeks with traditional culture methods.

Designed for field and laboratory use, QuickChek® SRB helps operators make faster treatment decisions, optimise biocide programmes and reduce corrosion-related risks.



- Results in approximately 20 minutes
- Detects all strains of SRB
- No incubation required
- Detects viable and non-viable SRB
- Semi-quantitative results
- Suitable for water, sludge, rust, biofilms and drilling fluids
- Portable and field deployable
- No specialist laboratory equipment required
- ASTM D8243 compliant

Why Detect Sulphate Reducing Bacteria?

Sulphate Reducing Bacteria are recognised as one of the primary causes of microbiologically induced corrosion (MIC) across industrial water systems.

SRB generate hydrogen sulphide and create conditions that accelerate corrosion within:

- **Pipelines**
- **Storage tanks**
- **Cooling systems**
- **Boilers**
- **Drilling operations**
- **Produced water systems**
- **Wastewater infrastructure**

Rapid detection enables operators to identify contamination early, verify biocide effectiveness and reduce costly asset failures.

How it works

QuickChek® SRB uses a patented immunoassay technology to detect the enzyme Adenosine-5'-Phosphosulfonate (APS) Reductase, which is common to all sulphate reducing bacteria.

The test employs purified antibodies that selectively bind to APS Reductase. When present, a colour reaction develops on the test membrane, allowing the concentration of SRB to be determined rapidly and accurately.

Unlike traditional culture methods, QuickChek® SRB directly detects the target enzyme and is not dependent on bacterial growth. This allows detection of both viable and non-viable SRB and eliminates many common sources of error.

How does it compare?

Feature	QuickChek® SRB	Culture Bottles	qPCR
Results Time	20 minutes	Up to 28 days	Hours to days
Field Deployable	✓	Limited	✗
Detects All SRB Strains	✓	Limited	✓
Measures Active Corrosion Indicator	✓	✗	✗
Minimal Equipment Required	✓	✓	✗
Suitable for Solids & Biofilms	✓	Limited	Limited

QuickChek® SRB has been independently shown to perform as well as or better than traditional culture methods and more expensive molecular techniques for many applications.

Applications

Oil & Gas
- Pipeline corrosion monitoring
- Produced water testing
- Drilling fluids and muds
- Tank bottom monitoring
- Biocide treatment verification

Boiler & Cooling Systems
- Cooling tower monitoring
- Heat exchanger protection
- Biofilm assessment
- Corrosion prevention programmes

Power Generation & Waste Incineration
- Feedwater monitoring
- Cooling water systems
- Asset integrity programmes
- Maintenance optimisation

Industrial Water Systems
- Corrosion coupons
- Sludge and sediment analysis
- Biofilm investigations
- Process water monitoring

Technical Specifications

Detection Method: Immunoassay detection of APS Reductase

Result Time: Approximately 8–10 minutes

Detection Limit: 10^3 cells/ml standard

Enhanced Detection: Down to 10^2–10^1 cells/ml in clean water samples

Sample Types:
- Water
- Biofilms
- Sludge
- Rust
- Sediment
- Drilling muds
- Corrosion deposits

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Storage Temperature: 2°C – 8°C

Operating Temperature: 18°C – 27°C

Make Faster Corrosion Control Decisions

QuickChek® SRB provides rapid, accurate and reliable sulphate reducing bacteria detection, enabling operators to respond faster, optimise treatment programmes and reduce corrosion-related costs.

Contact Modern Water to learn more about QuickChek® SRB.

Contact Information

For further information or to schedule your complimentary technical survey, please contact:

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