

SANS 241 Microbiology-Only Water Testing

Focused testing for E. coli, coliforms and microbiological indicators in drinking, stored and treated water.

[Request a Quote](#)

[Book Water Sampling](#)

SANAS-accredited laboratory testing. Sterile sampling bottles supplied.
Sampling available across Gauteng. Nationwide courier guidance.

Check Whether Your Water Is Microbiologically Safe

The SANS 241 Microbiology-Only package is designed to assess the presence of microbiological indicators that may affect the safety and hygiene of drinking water. It is suitable for routine monitoring, post-treatment verification, tank and system checks, and investigations where bacterial contamination is suspected.

Water can appear clear, taste normal and have no unusual smell while still containing E. coli, faecal coliforms or other microbiological indicators. These organisms cannot be reliably detected without laboratory analysis. The package is therefore especially important for boreholes, rainwater systems, JoJo tanks, schools, restaurants, estates, offices and any site where water is stored or supplied to people.

This package is often used where the chemical quality of the water is already known and only microbiological monitoring is required. It is also suitable after tank cleaning, pipe repairs, disinfection, filtration-system servicing, UV installation or contamination events.

H₂OGuru helps ensure that the correct sterile bottles, sampling technique and transport arrangements are used. This is important because microbiology samples are time-sensitive and can be compromised by poor handling.

Package at a Glance

Water Sources

Borehole, municipal, rainwater, stored and treated water

Assessment Type

Microbiological analysis

Reference Standard

SANS 241 drinking water requirements

Sampling

Sterile bottle and controlled handling required

Laboratory

SANAS-accredited testing partner

Reporting

Laboratory results and H₂OGuru interpretation

Who Should Use This Package?

Borehole Owners

Monitor water for faecal contamination, coliforms and other microbiological indicators.

Schools and Offices

Verify the microbiological quality of water supplied to learners, staff and visitors.

Restaurants and Hospitality

Assess water used for drinking, food preparation, ice, beverages and cleaning.

Estates and Complexes

Monitor shared tanks, backup water systems, communal boreholes and distribution points.

Tank and Rainwater Users

Check for contamination introduced through roofs, gutters, insects, birds, dust or storage systems.

Water Treatment Installers

Verify the performance of UV, chlorination and other disinfection systems after installation or servicing.

What Does the Package Test?

The exact microbiological profile is confirmed according to the selected package and intended use. A typical drinking water microbiology package includes the following determinants:

Parameter	What It Indicates	Why It Matters
E. coli	A specific indicator of recent faecal contamination.	Its presence indicates that the water should not be regarded as microbiologically safe for drinking without corrective action.

Faecal Coliforms	Possible contamination from human or animal faecal matter.	Helps identify contamination pathways, poor source protection or sanitation-related risks.
Total Coliforms	General hygiene, system integrity and possible environmental contamination.	May indicate problems in tanks, pipework, distribution systems, storage or sampling points.
Heterotrophic or Standard Plate Count	General bacterial activity and operational water quality.	Useful for monitoring regrowth, biofilm, storage conditions and treatment-system performance.

This package does not assess chemical contaminants such as nitrate, fluoride, iron, manganese, hardness or salinity. Where the chemical quality is unknown, the complete SANS 241 Chemistry and Microbiology package is usually the better option.

When Should Microbiology Be Tested?

Before Drinking From a Borehole

New or previously untested boreholes should be assessed before the water is used for human consumption.

After Tank Cleaning

Confirm whether cleaning and disinfection were effective before the water supply returns to normal use.

After Pipe Repairs

Repairs, leaks and pressure losses can introduce contamination into the water system.

After Treatment Installation

Verify whether UV, chlorination or other disinfection equipment is achieving the required result.

When Water Smells or Tastes Unusual

Odours, slime, sediment or changes in storage conditions may indicate microbiological growth.

For Routine Monitoring

Schools, businesses, hospitality sites and shared water systems may require regular microbiological checks.

Common Causes of Microbiological Contamination

Poor Borehole Sealing

Surface water, insects, soil or contaminants may enter through damaged or poorly protected borehole infrastructure.

Septic Tanks and Sewage

Nearby sanitation systems, leaks or wastewater can contaminate groundwater and stored water.

Dirty Storage Tanks

Sediment, biofilm, insects, dust and poor maintenance can support bacterial growth.

Rainwater Collection

Bird droppings, roof debris, gutters and first-flush contamination can introduce microorganisms.

Damaged Pipework

Leaks, low pressure, cross-connections and repairs can allow contamination into the system.

Failed Disinfection

Incorrect chlorine levels, ineffective UV systems or poor maintenance can allow organisms to pass through treatment.

Suitable Water Sources

Borehole Water

Microbiological quality can change after rainfall, flooding, nearby sanitation failures or borehole maintenance.

Municipal Water

Testing can investigate localised contamination, storage-tank problems, damaged plumbing or prolonged interruptions.

Rainwater

Rainwater should not be assumed safe because it is naturally collected. Roofs and tanks can introduce significant contamination.

JoJo Tanks and Stored Water

Stored water can deteriorate where tanks are dirty, poorly sealed, warm or infrequently used.

Treated Water

Post-treatment testing confirms whether disinfection is effective at the point where the water is used.

Shared Water Systems

Communal boreholes, estates, schools and workplaces benefit from routine microbiological monitoring.

Correct Sampling Is Critical

Sterile Sample Bottle

Microbiology samples must be collected in a sterile bottle supplied or approved for the analysis.

Clean Sampling Point

The tap or outlet must be prepared correctly to prevent contamination from the fitting itself.

Controlled Transport

Samples should be protected from heat and delivered within the required holding time.

Accurate Sample Information

The source, point, date, time and treatment status should be recorded when the sample is collected.

No Bottle Rinsing

Sterile microbiology bottles must not be rinsed before sampling.

Courier Planning

Courier timing should be arranged before collection because microbiology samples are time-sensitive.

H₂OGuru can provide the correct sterile bottles, sampling instructions and courier guidance. Where practical, professional sampling is recommended for high-risk or compliance-related investigations.

The H₂OGuru Sample-to-Solution Process

1

Discuss the source and microbiological risk

2

Supply sterile sampling bottles

3

Collect and transport the sample correctly

4

Complete accredited laboratory testing

5

Interpret the microbiology results

6

Recommend corrective action where required

What You Receive

Laboratory Test Report

The formal microbiological results issued by the accredited testing laboratory.

H₂OGuru Interpretation

A clear explanation of whether the microbiological indicators are acceptable for the intended use.

Practical Next Steps

Where required, the report may recommend cleaning, disinfection, flushing, treatment checks or repeat testing.

Why Choose H₂OGuru?

H ₂ OGuru Service	Benefit to the Client
Sterile sampling support	Reduces the risk of contaminated bottles, poor sampling technique or invalid results.
Accredited laboratory testing	Provides reliable microbiological data produced within the laboratory's accredited scope.
Clear interpretation	Explains the significance of E. coli, coliforms and plate count findings.
Corrective-action guidance	Helps identify whether cleaning, disinfection, source protection or further investigation is needed.
Verification testing	Confirms whether corrective action or treatment has restored microbiological control.

Need a Different Analysis?

Not every water source requires the same laboratory profile. Explore the other H₂OGuru testing packages to select the analysis that matches your water source and intended use.

SANS 241 Chemistry and Microbiology

A complete drinking water assessment covering chemical and microbiological quality.

SANS 241 Chemistry Only

For minerals, metals, salts, hardness, scaling and chemical compliance.

SANS 1657 Bottled Water

For bottled, purified, refill and packaged drinking water.

Irrigation Water Testing

For salinity, sodium hazard, crop suitability and irrigation performance.

Wastewater and Effluent

For process monitoring, discharge assessment and reuse investigations.

SANS 51008 Concrete Water

For water used in concrete mixing and construction applications.

Water Source Identification

Compare seepage water with municipal, borehole or groundwater sources.

Custom Water Testing

Tailored parameter selection for specialised projects and investigations.

Do Not Rely on Appearance Alone

Arrange a microbiological water test to check for E. coli, coliforms and other indicators that cannot be seen, smelled or tasted.

[Request a Quote](#)

[Book Water Sampling](#)