

One System. Total Water Confidence.

The complete digital water testing solution for potable, ballast, boiler/cooling, sewage, and legionella.

# Your Fleet is Unified. Why Isn't Your Water Testing?

For too long, managing water quality onboard has been a complex and disconnected process. Shipowners and managers juggle multiple suppliers for different test kits that rely on subjective visual checks, and then overwhelm the crew with manual paperwork. This fragmented approach is not only inefficient - it's a risk to your crew, assets, and compliance.

Does this sound familiar?

**Compliance confusion:** Scrambling to meet separate regulations for potable water, legionella, ballast, sewage, and boiler water with different kits and procedures.

**Inaccurate results:** Relying on outdated colour comparator discs, where one person's "pass" is another's "cause for concern," leaving compliance and safety to guesswork.

**Data voids:** Test results are logged on paper, filed away in a cabinet onboard, and invisible to the fleet manager ashore. There is no central oversight, no trend analysis, and no real-time visibility.

**Supply chain headaches:** Wasting time and money sourcing multiple test kits and reagents from different suppliers, leading to inconsistent quality and logistical delays.

It's time to see the complete picture.



Introducing LiquiLab: Your Single Source for Water Quality

We have redesigned water testing from the ground up. LiquiLab is the first digital onboard water testing solution offered in a modular format that is capable of consolidating all your testing needs into one robust, easy-to-use ecosystem.

From potable water safety to ballast water compliance, LiquiLab replaces guesswork with digital precision and fragmented logs with centralised, cloud-based data.

With our unique, tailorable, modular approach, you can build the exact kit you need. Housed in a stackable storage system, LiquiLab adapts to your vessel's requirements, your budget and your space constraints.

One supplier. One system.
One clear view of your fleet's water health.



# From Manual Guesswork to Digital Certainty

At the heart of the LiquiLab system lies a revolution in accuracy and ease of use. We are moving water testing beyond subjective interpretation and into the era of digital analysis, providing you with results you can trust and data you can put to work.

#### The Power of the Photometer

Our advanced, handheld photometer is the central hub for your testing. It doesn't just give you a result; it guides you through the entire process.

**Unmatched Accuracy**: Utilising 18 parallel wavelengths, the photometer delivers readings that are at least 5 times more accurate than traditional comparator discs, thereby eliminating human error and ambiguity.

**Step-by-Step Guidance:** A large 5.5" HD touchscreen provides clear, animated instructions for every test. Designed for the crew, not the laboratory, it delivers easy to understand results with simple, step-by-step guidance.

**Built-in Intelligence:** The system uses a barcode and QR code scanner to identify testing locations and reagents, ensuring you never use wrong or expired chemicals again.



#### Fleet-Wide Visibility from a Single Screen

LiquiLab doesn't just improve testing on one vessel; it transforms how you manage your entire fleet.

**Instant Cloud Sync:** Results are instantly uploaded to a secure cloud platform via Wi-Fi, Bluetooth, or USB. Say goodbye to perishable paper records and hello to a tamper-proof digital logbook.

**Centralised Management:** Fleet managers and onshore teams can log in to a single portal to view test results from every vessel, anywhere in the world. Monitor compliance, compare data across assets, and identify trends before they become problems.

**Custom Parameters:** Set your own acceptable limits for different tests and sampling points. The system will automatically flag any out-of-spec results, allowing for immediate corrective action.

This isn't just testing.

This is intelligent water management.



# SAFEGUARD YOUR CREW'S HEALTH. GUARANTEE YOUR COMPLIANCE.

Providing safe drinking and washing water is not only a necessity, but also a fundamental requirement under the **Maritime Labour Convention (MLC, 2006)**. LiquiLab delivers a new standard in potable water testing, ensuring you meet—and exceed—your obligations for crew welfare and safety.

It is widely advised that every vessel has a Water Safety Plan (WSP) in place. LiquiLab is the ideal tool for implementing, monitoring, and documenting your WSP with digital accuracy.

#### **Total Confidence in Every Drop**

From bacteria to chemical balance, LiquiLab empowers you to verify water safety instantly, whether you're using bunkered water, producing it onboard, or managing a treatment system.

LiquiLab tests for key potable water parameters, including:



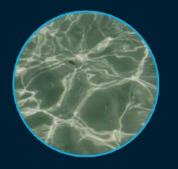
Bacteria
E-coli / Coliforms,
Enterococci,
Legionella,
Total Bacterial Count



**Disinfectants**Total / Free Chlorine,
High Range Chlorine



Physical Properties pH, Turbidity, Colour, Hardness



Chemical
Contaminants
Iron, Copper,
Nitrate, Nitrite,
and more.



# Combatting the Invisible Threat in Your Water Systems

Legionella is a dangerous waterborne bacterium that causes Legionnaires' disease, a severe and potentially fatal form of pneumonia. Maritime vessels are uniquely vulnerable, as their complex water systems and warm, humid conditions create the perfect breeding ground for this silent threat.

An outbreak can have devastating consequences, leading to serious illness among crew and passengers, significant reputational damage, and regulatory penalties.

#### **High-Risk Areas Onboard**

Legionella thrives in water systems where temperatures range from 20°C to 45°C and is spread through the inhalation of contaminated water droplets (aerosols). Key risk areas that require regular monitoring include potable water systems, HVAC systems and cooling towers.

#### **Compliance Through Best Practice**

While no single global maritime law specifically addresses Legionella, a vessel owner's duty of care under the MLC, 2006, mandates providing water that is free from contamination. Compliance typically follows established international best practices and guidelines from bodies such as The World Health Organisation (WHO) and various Flag State and Port State authorities. Don't be caught out.



#### COMPLY WITH THE BWM CONVENTION.

# PROTECT MARINE ECOSYSTEMS.

The **IMO's Ballast Water Management (BWM) Convention** is in full force, requiring all ships to manage their ballast water to prevent the spread of invasive aquatic species. Non-compliance can lead to significant fines, delays, and reputational damage.

LiquiLab provides the essential tools to test your ballast water and verify the performance of your treatment system, ensuring you meet the stringent D-2 discharge standard.

#### **Verifying Your Treatment System is Working**

Whether your system uses UV, electro-chlorination, or other biocides, LiquiLab allows you to conduct the indicative tests required to prove its efficacy and ensure the water you discharge is safe for the environment.

#### LiquiLab provides indicative testing for critical D-2 parameters:



Indicator Microbes
Toxicogenic Vibrio Cholerae,
Escherichia Coli, Intestinal
Enterococci



Total Bacteria Count
To assess the overall
microbiological quality
of the treated water.



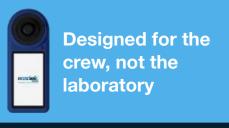
Residual Biocides
Ensuring that any chemicals
used in treatment (like chlorine)
are at environmentally safe
levels before discharge.

With LiquiLab, you can maintain an accurate Ballast Water Record Book with reliable, digital data, ready for inspection by port state control at a moment's notice.



## PROTECT YOUR MOST CRITICAL ASSETS.

## MAXIMISE EFFICIENCY.



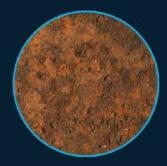
The health of your boiler and cooling water is directly linked to the health of your most valuable machinery. Improperly treated water leads to corrosion, scale buildup, and biological fouling, causing costly damage, inefficient performance, and unexpected downtime.

LiquiLab provides a comprehensive suite of tests to precisely manage your water treatment programme, protecting your main engines, generators, and heating systems.

#### From Prevention to Peak Performance

Regular, accurate testing is the key to preventing catastrophic failures. By maintaining optimal water chemistry, you prevent corrosion that eats away at metal components and scale that restricts heat transfer, ensuring your systems run efficiently and reliably.

#### LiquiLab tests for all essential boiler and cooling water parameters:



Corrosion Control pH, Alkalinity, Chlorides, Dissolved Oxygen



Scale Prevention
Hardness,
Phosphates, Silica



Treatment Levels
Nitrite, Sulfites,
DEHA, Hydrazine,
Molybdate



Contamination Indicators Conductivity, Total Dissolved Solids (TDS)

Maintain perfect chemical balance, extend the life of your equipment, and keep your vessel running at peak performance.



#### UPHOLD YOUR ENVIRONMENTAL DUTY.

# COMPLY WITH MARPOL ANNEX IV.

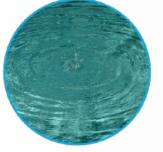
Discharging untreated or improperly treated sewage can cause severe damage to marine ecosystems and poses a significant health risk. Global and local regulations, led by MARPOL Annex IV, strictly govern the discharge of sewage effluent from ships.

LiquiLab offers a straightforward and reliable method for testing the performance of your onboard sewage treatment plant, ensuring compliance with international effluent standards, and protecting the marine environment.

#### **Prove Your Compliance with Confidence**

Regularly testing the quality of your treated effluent is the only way to be certain your system is functioning correctly and that you are discharging responsibly. The LiquiLab system simplifies this process, providing you with the accurate data needed to maintain your logs and demonstrate compliance to authorities.

#### LiquiLab tests for key sewage effluent parameters, including:



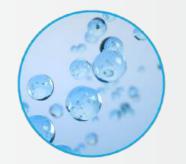
Chlorine



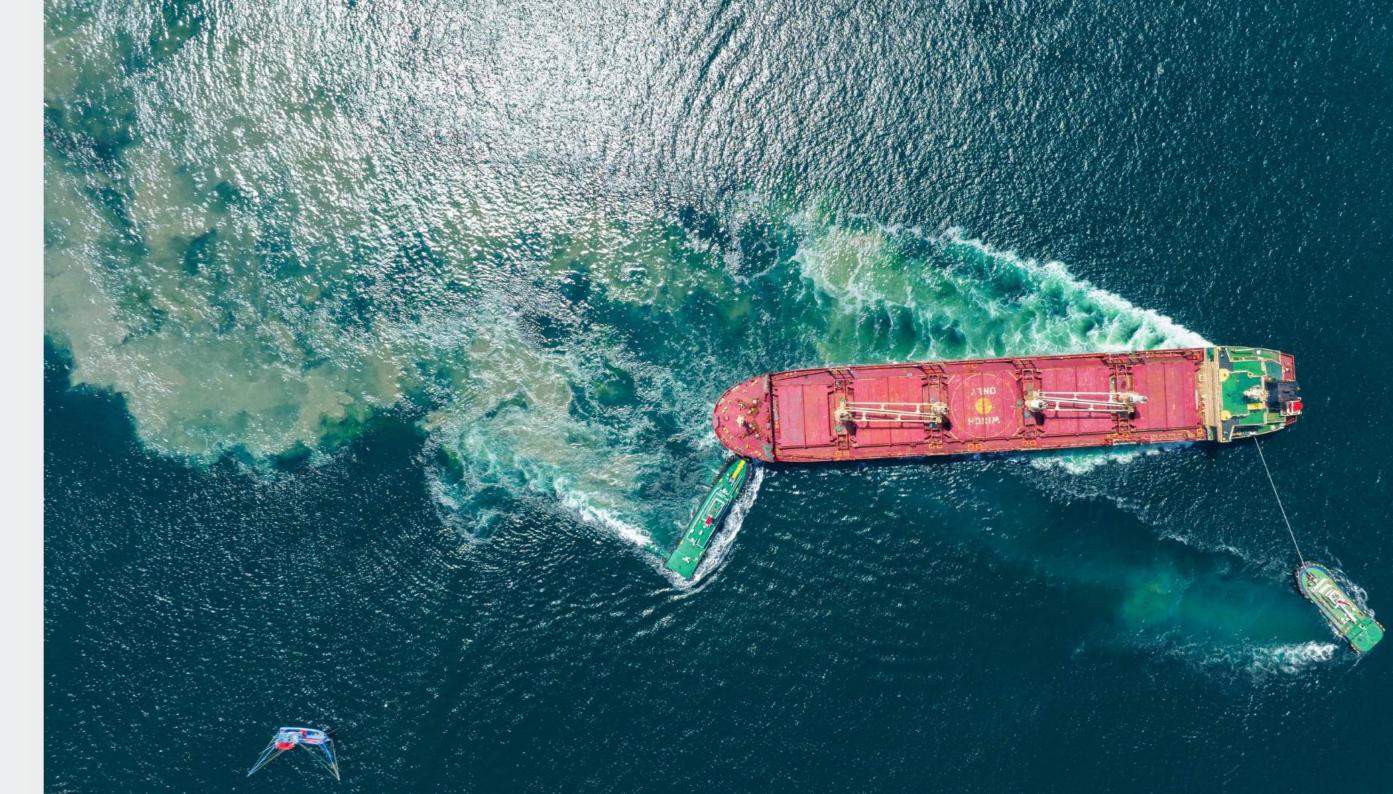
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Total Suspended Solids



All required indicators of treatment effectiveness



# Why Settle for Potential Results When You Can Have Definitive Answers at Your Fingertips?

LiquiLab isn't just a new product; it's a new standard for maritime water testing. We designed it to be the most comprehensive, convenient, and accurate solution on the market.

#### The only truly modular solution

Our unique, stackable storage system allows you to build the exact kit you need. Start with Potable Water and add Ballast or Boiler modules later; whatever combination you require, LiquiLab can be configured to meet your precise needs, and updated whenever you require.

#### The most comprehensive testing

With more tests for potable and boiler water than any other competitor, LiquiLab provides the most detailed picture of your water quality, ensuring compliance with MLC 2006 and major flag states.

#### Digitally integrated and centralised

Consolidate all water testing data from your entire fleet into a single cloud-based platform. Gain unparalleled oversight and move away from unreliable paper records.



#### **Unmatched accuracy and reliability**

While standard testing methods often rely on 'most probable' estimates for biological testing, LiquiLab provides actual, quantifiable results you can depend on. Our digital photometer removes guesswork for superior precision.

#### Sustainable & cost-effective

Only top up the reagents you use. Our proactive consumables team can manage your annual replenishments as part of a managed service, reducing waste and ensuring you're always prepared.

### **The Martek Marine Promise**

When you choose LiquiLab, you're not just buying a test kit - you're partnering with a global leader in maritime technology.



25+ Years of Maritime Experience



Worldwide Delivery & Support



5-Star Customer Service



Consultative Experts to Guide You

## Ready for a Smarter Way to Manage Your Water?

Stop juggling multiple suppliers, chasing paperwork, and questioning your test results.

It's time to consolidate, digitalise, and take complete control of your fleet's water safety with LiquiLab.

Contact our specialists today for a complimentary, no-obligation consultation to design the ideal water testing solution for your fleet.



#### **CONTACT US**



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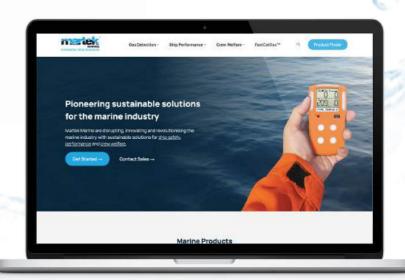
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