

# **Potable Water Testing Kit Buyers Guide**

## Q What regulations are associated with potable water testing kits?

**Maritime Labour Convention 2006, Standard A3.2 - Food and Catering**, para 7 – “the competent authority shall require that frequent documented inspections be carried out on board ships, by or under the authority of the master, with respect to....supplies of drinking water”

**World Health Organization (WHO) Guide to Ship Sanitation (2011) & Guidelines for Drinking Water Quality (2008)** – “Recommended parameters to be monitored:

E. coli or coliforms; Chlorine residual (daily); Microbial quality - bacterial plate count; pH (daily); Turbidity; Corrosion-related contaminants - iron & copper.

## Q How often should you test the water?

Under **MLC 2006** you’ve now got to do frequent documented inspections of drinking water supplies. The requirement can at first seem confusing due to the different requirements of the various rules/regulations and policies of different Flag Administrations.

**MLC 2006** defines you must perform “frequent documented inspections”.

**World Health Organization on Guidelines** - “Source water is monitored at the port to ensure that water is safe. The ship’s master is responsible for operational monitoring: quality of source water: disinfectant residuals and pH (e.g., daily); microbial quality of treated water, particularly after maintenance or repairs. The frequency of monitoring should reflect the probable rate of change in water quality. For example, monitoring of drinking-water on ships maybe more frequent when the ship is new or recently commissioned, with frequencies decreasing in the light of review of results. Similarly, if the ship’s water system has been out of control, monitoring following restoration of the system would be more frequent until it is verified that the system is clearly under control.”

**ILO Convention 78**- “Physically check quality of water at random using different outlets.

## Q When should you plan for purchasing your potable water test kit?

The simple answer is now! The regulations came into force on the 20th August 2013 so you don’t have long to act. To ensure you’re compliant don’t hesitate to order to avoid a delay in supply due to high demand.

## Q What Advice do ICS offer regarding MLSC Compliance?

**The International Chamber of Shipping (ICS)** issued urgent advice to shipowners to help them pre-empt port state control problems when the Maritime Labour Convention (MLC) entered in force, on 20th August 2013. “Regardless of the progress which may or may not have been made by a vessel’s flag state, ships are required to meet the standards in the Convention. ICS recommended you prepare a Declaration of Maritime Labour Compliance (DMLC) Part II before 20th August for all your ships, which will serve as evidence that YOUR ship meets MLC standards. To issue a DMLC you must of course have provided potable water test kits for your ships.

## Q What should you look for in a potable water testing kit?

- A kit that contains all tests required under each of the above regulations.
- A kit that’s proven to be quick and easy to use.
- A kit that contains a large number of tests – beware low cost kits with a small number of tests as they’ll cost you much more in the long term. Calculate the average cost per test.
- A kit that contains a multi-lingual training DVD showing how to sample and test water.
- A kit supplied by a trusted specialist marine company with a track record in the industry
- Quick availability to meet the high demand for kits due to the urgency to comply with the new regulation.

## Q What features will make the operation of the kit easier & quicker?

No glass ampoules to break

No instruments to calibrate or calibration solutions

No messy & difficult ‘Thio-bags’

No need for sample dilution pots

Help decide on your preferred Potable Water Test Kit by using the following comparison table of key features of manufacturer’s systems – **See next page**



## Potable Water Kit Comparison Table

Key Features	Maker				
	Martek Marine DRINKSAFE™ Max	Martek Marine DRINKSAFE™	Wilhelmsen	Drew Marine	Kittiwake
Total tests in standard kit	2,335	1,815	1,025	100	285
Guaranteed to meet all rules/legislation & class/flag state requirements?	YES	NO	NO	NO	NO
Delivery time for 20 kits	Ex-stock	Ex-stock	3-5 days	7 days	4-6 wks
>1000 Kits ordered & rising rapidly	YES	YES	?	?	?
<b>TESTS INCLUDED IN STANDARD KIT</b>					
Free Chlorine DPD 1	500	500	250	30	100
Total Chlorine DPD 3	500	500	250	30	100
High Range Chlorine	250	250	250	0	0
Chlorine Shelf Life (Months)	115	115	?	?	?
pH	500	500	Optional	20	0
pH Shelf Life (Months)	115	115	?	?	?
E-Coli, Coliforms	25	25	25	20	25
E-Coli, Coliforms Shelf Life (Months)	36	36	?	?	?
Enterococci	20	0	Optional	0	20
Enterococci Shelf Life (Months)	36	0	?	?	?
Total Plate Count / HPC	40	40	Optional	0	40
Total Plate Count Shelf Life (Months)	16	16	?	?	?
Turbidity Tube 1	1	0	Optional	0	0
Copper	250	0	Optional	0	0
Copper Shelf Life (Months)	115	?	?	?	?
Iron	250	0	Optional	0	0
Iron Shelf Life (Months)	55	?	?	?	?
Legionella	Optional	Optional	Optional	No	Optional
UV Lamp	YES	YES	YES	YES	YES
Includes Incubator	YES	YES	YES	NO	YES
3 Year Guarantee on Incubator	YES	YES	?	NO	?
Uses sterile test bottles	YES	YES	NO	YES	NO
Uses awkward thio-bags	NO	NO	YES	NO	YES
Uses hazardous glass ampoules	NO	NO	NO	YES	NO
Requires instrument calibration before use	NO	NO	NO	YES	NO
Need for sample dilution pots	NO	NO	YES	NO	NO
Multi-language training DVD in test	YES	YES	NO	NO	NO
Cost per test - approx	\$1.20	\$1.10	\$4.65	\$21.38	\$7.47
Global technical support	YES	YES	?	?	?
Dedicated employed microbiologist	YES	YES	?	?	?

## What Our Customers Say...

“We chose the DRINKSAFE™ Max because it provided us with Martek’s guaranteed compliance with all flag state requirements and it gave the crew the benefit of the simplest and easiest test procedures on board. Furthermore, the on-board training procedure provides a test certificate which acknowledges that the crew has undergone the training and test that they are competent to use it.

We were advised that each component of the kit took into account the following rules and bodies to full satisfaction:

- MLC 2006
- WHO
- ILO
- IACS Member Societies

*Chris Goldsworthy*  
*Bernard Schulte Shipmanagement*



“We chose DRINKSAFE™ because it contained enough tests to daily water testing at multiple outlets as per WHO + ILO guidelines offering the lowest cost per test of all kits. DRINKSAFE™ was also easy to understand and the kit looks simplest and quickest to use.”

*Ricardo Sclafani*  
*V Ships*



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