

ERTEK POTABLE WATER TEST KIT

Potable water is used in various ways on board ships, including direct human consumption, food preparation and sanitation/hygiene activities.

As defined by the WHO Guidelines for Drinking-water Quality 2004, it does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages. As the usage areas of potable water, it should be monitored regularly for crew and passengers' health according to international standards / regulations since it is intended for direct human consumption.

With current International Regulations mentioned by ILO¹, 178 (2009), WHO² and MLC³, 2006 about potable water quality on board ships, owners and operators must be more sensitive and careful to meet and follow all recommendations for the quality of potable water in all those regulations or relevant national standards, whichever are stricter.

As specified in MLC, 2006 which was adopted by ILO, each ship owner / operator should ensure that they can provide good quality and hygienic drinking water to seafarers. The MLC will thus come into force on 20 August 2013.

ERTEK POTABLE WATER TEST KIT has been achieved for using on board ships according to all these current International Regulations about drinking/potable water quality specified in ILO, 178 (2009), WHO and MLC, 2006.

Critical Parameters to be recommended to monitor regularly in WHO Guidelines for Drinking Water Quality;

<i>E.Coli & Coliform Bacteria</i>	<i>(none)</i>
<i>Free Chlorine</i>	<i>(0.2 – 0.5 ppm)</i>
<i>pH</i>	<i>(6.5 – 8.5)</i>
<i>Turbidity</i>	<i>(< 5 NTU)</i>

Features;

- enables to check Microbial Contamination (E.Coli & Coliform Bacteria), Free Chlorine, pH and Turbidity which are the most critical parameters in drinking water according to WHO Guidelines for Drinking Water Quality,
- easy to use,
- provides quick and reliable results,
- at low cost set and its components (esp. reagent & sample bottles for microbial contamination) are lower cost in the next deliveries,
- suitable for *EPA⁴ Guidelines*,
- in portable sturdy plastic case.

¹ The International Labour Organization

² World Health Organization

³ The Maritime Labour Convention

⁴ Environmental Protection Agency

CONTROL MEASURES

Escherichia Coli (E.Coli) & Coliform

E.Coli & Coliform are indicators of potential contamination from pathogens associated with human excreta. They are recommended to measure regularly and ensure that you determine microbial contamination in potable / drinking water. Both parameters cannot be detected at any amount in potable / drinking water. In other words, water intended for human consumption should contain no E.Coli & Coliform.

Free Chlorine

Chlorine is widely used as an important disinfectant in drinking water treatment. It prevents to growth of microbial hazard in water. After an effective disinfection, free chlorine should be at the concentration of between 0.2 mg/L (ppm) and 0.5 mg/L in drinking water. In case of above this concentration, there might be some health problems for the consumers like nausea, diarrhea.

pH

There is no direct impact on the consumers. But, pH value should be ideally 6.5 – 8.5 values in drinking water because of well-satisfied water disinfection and clarification.

Turbidity

Turbidity is another important measure in drinking water. It shouldn't be usually detected at high levels in drinking water because it can protect microorganisms from the effects of disinfection, stimulate the growth of bacteria, and give rise to a significant chlorine demand.

According WHO Guidelines, the appearance of water with a turbidity of less than 5 NTU is usually acceptable to consumers, although this may vary with local circumstances.

Product Code	Product Description	Units/Tests per Kit	Expire Date	Limit Values
SP-KS-250	E.Coli & Coliforms	20 TESTS	3 years*	0
SP-KS-194	Free Chlorine Test Kit (0.1 – 3.00 mg/L)	100 TESTS	2 years*	0.2 – 0.5 mg/L
SP-KS-251	pH Measuring Tape (5.0 to 10.0)	100 TESTS	Not Applicable	6.5 – 8.5
SP-KS-252	Turbidity Test	1 UNIT	Not Applicable	< 5 NTU

* from the date of manufacture.

**when stored at temperatures of 10 to 25°C.