

# POTABLE WATER TEST KIT-C



## DESCRIPTION

The POTABLE WATER TEST KIT-C is a monitoring kit enabling shipboard personnel to regularly test the drinking water on board to help determine if it is suitable for consumption. When used regularly, it demonstrates that the vessel remains in compliance with ILO Maritime Labor Convention, 2006. The Convention requires the vessel crew to frequently inspect their potable water system and monitor the quality of drinking water. The POTABLE WATER TEST KIT-C enables shipboard personnel to test the drinking water as part of their inspection procedures and to demonstrate they are monitoring water quality.

The POTABLE WATER TEST KIT-C contains everything needed to monitor the drinking water on board in accordance with WHO guidelines. The kit measures pH, free and total chlorine, plus total coliforms and E.coli bacteria. Because variation in the pH level can affect chlorination effectiveness, it is important to monitor and control the pH. Additionally, potable water should be free of bacteria that are harmful to humans. Testing for coliform bacteria determines if harmful bacteria are present. The test is an important safety measure, especially when potable water is loaded in port.

Chlorine testing is done using the U.S. EPA-approved DPD (N,N-diethyl-p-phenylenediamine) methodology, where free chlorine reacts with DPD to form a pink color. Chlorine Activator Solution is used to determine total chlorine (the sum of free and combined chlorine). The Chlorine level is



determined using ampoules and a visual comparator for sample color comparison against standards.

The presence/absence test for simultaneous detection of total coliforms and E.coli is performed according to EPA approved USEPA total Coliform Rule. When using the test, a color change of the test solution to blue-green confirms the presence of total coliforms. The presence of E.coli is detected by illuminating the sample with UV light. A light blue fluorescence in the test solution indicates the presence of E.coli.

It should be noted that the sample must be incubated 18-24 hours at 34.5 °C to 37 °C. Drew Marine offers an incubator

## FEATURES

- pH Tester and Buffer Kit
- Chlorine Ampoule Test Kit, including color comparators
- Coliform Test Kit, including UV lamp and safety goggles
- Vacuum-sealed, self-filling ampoules with premeasured reagents
- Convenient Carrying Case

## BENEFITS

- Monitors pH level of drinking water to determine if the pH supports effective chlorination
- Monitors the level of free and total chlorine in the drinking water
- Monitors presence/absence of total coliforms & E.coli
- Eye protection including use of UV Lamp
- Easy to use, accurate results
- Centralized storage for test kits' components
- Withstands rigors of shipboard operations
- Easy to carry



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and calibration thermometer if a suitable place is not available on board.

**Note:** A thermometer should be used to monitor the incubator's temperature. The thermometer Drew Marine offers is ordered separately from the incubator. Refer to order information for additional details.

## APPLICATION AND USE

The POTABLE WATER TEST KIT-C is used for testing potable water, whether supplied from shore side or produced on board. It is recommended that potable water be tested weekly, (or as may be required by the Flag Administration) as well as when potable water is taken on board.

Test result should be recorded on a chart or log and retained on board for at least 12 months (or as required by the Flag Administration).

## SAMPLING

It is recommended samples be collected on board and analyzed weekly and whenever potable water is taken on board. Sample points should be changed each week in order to obtain representative samples of the potable water. Refer to Drew Marine's Guide for Potable Water Safety, for more information on sampling.

## TEST KIT CONTENTS AND ORDER INFORMATION

### POTABLE WATER TEST KIT-C (PCN 1AB1973) contains:

- pH Tester 30
  - 1 set of instructions
- pH Buffer Pack, 20 x 20 ml packets
- Chlorine Residual Tests
  - 1 cylindrical comparator 0.0 -1.0 ppm
  - 1 color comparator 1.0-5.0 ppm
  - 1 snap cup (test vial)
  - 30 ampoules (30 tests)
  - Chlorine Activator Solution

- 1 set of instructions
- Coliform / E.coli Tests
  - 1 x Ready Cult Coliforms 100 (20 tests)
  - 1 x Sterile Bottle, DA 120 ml, 20/pk (20 tests)
  - 1 x UV Pocket Lamp, 4 x AA battery powered
  - 1 x UV Safety Goggles
  - 1 set of Instructions
- Carrying Case

Reorder Information	PCN
POTABLE WATER TEST KIT-C Refill	1AB2190
FREE AND TOTAL CHLORINE Refill	1AB2191
COLIFORM/E.COLI Refill	0394106

### POTABLE WATER TEST KIT-C Refill contains:

- Buffer Solution, pH 7.0, 20ml/20pk (20 tests)
- Chlorine Ampoule, Refill pack, 30 Ampoules (30 tests)
- Chlorine Activator Solution
- Readycult Coliforms 100, 20/pk (20 tests)
- Sterile Bottles, DA 120 ml, 20/pk (20 tests)
- 1 Test vial

### FREE AND TOTAL CHLORINE Refill contains:

- Chlorine Ampoule, Refill pack, 30 Ampoules (30 tests)
- Chlorine Activator Solution
- 1 Test vial

### COLIFORM/E.COLI REFILL contains:

- 1 x Ready Cult Coliform 100 (20 tests)
- 1 x Sterile Bottle, DA 120 ml, 20/pk (20 tests)

 **Contact your Drew Marine representative for more information**

**NOTE:** The refill kit contains approximately a 90 day supply of consumables.

Additional Equipment	PCN
UV Pocket Lamp, 4 x AA battery powered	0394080
Safety Goggles	0394098

## INCUBATOR PWTK-C

220V version PCN 1AB2328

110V version PCN 1AB3589

### Description:

- Exterior Dimensions: 28.5 X 28 X 33.5 cm
- Interior Dimensions: 23 X 20 X 20 cm
- Weight: 8.3 kg
- Capacity: 0.375 cu. ft.
- Temperature Range: ambient +5 °C to 60 °C
- Stability: +/-0.6 °C at 37 °C (N.I.S.T. traceable thermometer)
- Uniformity: 0.65 °C at 37 °C



### Features:

- Corrosion resistant chamber.
- Door with large viewing area.
- Pilot light to indicate heating.
- Automatic safety cut-out.

### Benefits:

- Withstands the rigors of onboard use.
- Testing easily carried out on board.
- Overheating prevented.

## THERMOMETER PWTK-C (PCN 1AB2344)

### Description:

- Non-toxic glass thermometer
- Range: -20 °C to 110 °C , with 1 °C resolution,
- Length: 305mm long, 76mm immersion
- Scale: Celsius

## IMPORTANT INFORMATION

Drew Marine maintains Safety Data Sheets on all of its products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees.

Our Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Drew Marine products.



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