

## SPECIFICATIONS

|                  |  |
|------------------|--|
| Range            | 0.00 to 2.50 ppm   |
| Resolution       | 0.01 ppm   |
| Accuracy         | ±0.04 ppm ±4% of reading<br>@ 25 °C  |
| Typical EMC Dev. | ±0.01 ppm  |
| Light Source     | Light Emitting Diode<br>@ 525 nm   |
| Light Detector   | Silicon Photocell  |
| Method           | Adaptation of the Standard Methods for the Examination of Water and Wastewater, 20 <sup>th</sup> edition, Ascorbic Acid method. The reaction between phosphate and the reagent causes a blue tint in the sample. |
| Environment      | 0 to 50°C (32 to 122 °F)<br>max. 95% RH non-condensing   |
| Battery Type     | 1 x 1.5V AAA   |
| Auto-Shut Off    | After 10 minutes of non-use<br>and 2 minutes after reading   |
| Dimensions       | 81.5 x 61.0 x 37.5 mm<br>(3.2 x 2.4 x 1.5")  |
| Weight           | 64 g (2.25 oz.)  |

## OPTIONAL ACCESSORIES

|                   |                                      |
|-------------------|--------------------------------------|
| Reagent Sets      |                                      |
| MI512-25          | Phosphate powder reagent,<br>25 pcs. |
| Other Accessories |                                      |
| MI0011            | Glass cuvettes (2 pcs.)              |
| MI0013            | Stoppers for cuvettes (2 pcs.)       |

## CERTIFICATION

Milwaukee Instruments conform to the CE European Directives.

**Disposal of Electrical & Electronic Equipment.** Do not treat this product as household waste. Hand it over to the appropriate collection point for the recycling of electrical and electronic equipment.

**Disposal of waste batteries.** This product contains batteries. Do not dispose of them with other household waste. Hand them over to the appropriate collection point for recycling.

Please note: proper product and battery disposal prevents potential negative consequences for human health and the environment. For detailed information, contact your local household waste disposal service or go to [www.milwaukeeinstruments.com](http://www.milwaukeeinstruments.com) (USA & CAN) or [www.milwaukeeinstruments.eu](http://www.milwaukeeinstruments.eu).

## RECOMMENDATION

Before using this product, make sure it is entirely suitable for your specific application and for the environment in which it is used. Any modification introduced by the user to the supplied equipment may compromise the tester's performance. For your and the tester's safety do not use or store the tester in hazardous environment. To avoid damage or burn, do not perform any measurement in microwave ovens.

## WARRANTY

This tester is warranted against defects in materials and manufacturing for a period of 2 years from the date of purchase. This warranty is limited to repair or free of charge replacement if the tester cannot be repaired. Damage due to accidents, misuse, tampering or lack of prescribed maintenance is not covered by warranty. If service is required, contact your local Milwaukee Instruments Technical Service. If the repair is not covered by the warranty, you will be notified of the charges incurred. When shipping any tester, make sure it is properly packaged for complete protection.

Milwaukee Instruments reserves the right to make improvements in design, construction and appearance of its products without advance notice.

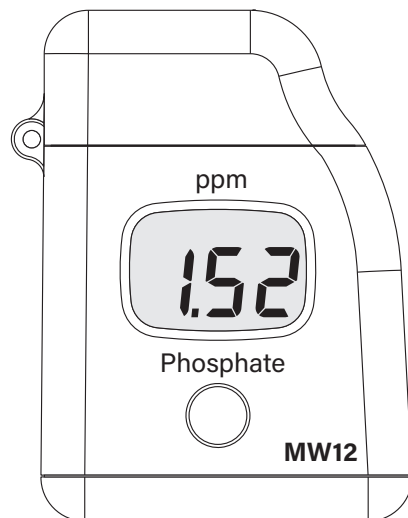


RoHS  
compliant



# USER MANUAL

## MW12 Digital Phosphate Tester



[milwaukeeinstruments.com](http://milwaukeeinstruments.com) (USA & CAN)  
[milwaukeeinstruments.eu](http://milwaukeeinstruments.eu)



## PRELIMINARY EXAMINATION

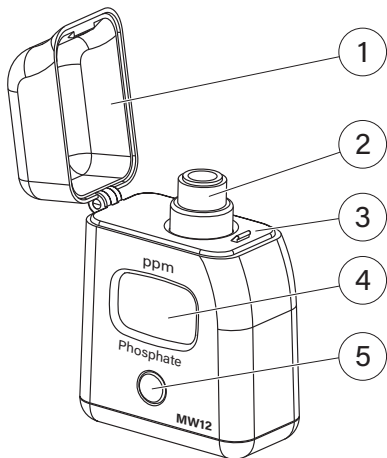
Thank you for choosing Milwaukee Instruments!  
Remove the tester and accessories from the packing and examine it carefully.

For further support please contact your closest Milwaukee Instruments office.

Each **MW12** tester is supplied complete with:

- Sample cuvette and cap (2 pcs.)
- Phosphate Low Range powder reagents (6 tests)
- 1 x 1.5V AAA Battery
- Instruction manual

## FUNCTIONAL DESCRIPTION



1. Dust cover
2. Cuvette with cap
3. Cuvette holder
4. Liquid Crystal Display
5. On/Off button

## OPERATION

- Press the On/Off button to turn the tester on. All segments are displayed for a few seconds followed by "Add," "C1" with "Press" blinking.



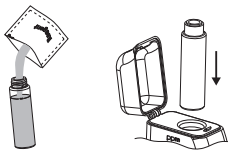
- Fill the cuvette with 10 mL of unreacted sample and replace the cap. Place the cuvette into the tester and close the cap.



- Press the On/Off button. When the display shows "Add," "C.2" with "Press" blinking, the tester is zeroed.



- Remove the cuvette, unscrew the cap and add the content of one packet of **MI512-0** reagent. Replace the cap and shake gently for 2 minutes until the powder is completely dissolved. Replace the cuvette into the tester.



- Press and hold the On/Off button. The display will show the countdown prior to the measurement. Alternatively, wait 3 minutes and press the On/Off button.



- When the timer ends the tester will perform the reading. The tester directly displays the concentration of phosphate in ppm.



The tester automatically turns off 2 minutes after reading.

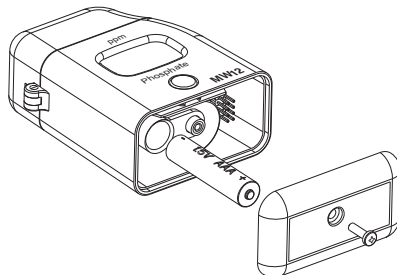
## BATTERY REPLACEMENT

To save the battery, the tester shuts down after 10 minutes of non-use and 2 minutes after reading. A fresh battery lasts for a minimum of 5000 measurements, depending on the light level.

When the battery capacity is under 10 %, the tester displays "bAt" at start up.

When the battery is drained the tester display's "bAd" then "bAt" message.

Replace the battery with a new one and restart the tester.



To replace the battery, follow the steps:

- Press the On/Off button to turn the tester off.
- Turn the tester upside down and use a screwdriver to unfasten the screw and remove the battery cover.
- Remove the old battery and replace it with a fresh 1.5V AAA battery, inserting the negative end first.
- Replace the battery cover, fasten and tighten the screw.