### SPECIFICATIONS

Range	0.0 to 14.0 pH	
Resolution	0.01 pH	
Accuracy (@25 °C)	±0.1 pH	
Calibration	Manual, at 2 points through trimmers	
pH electrode	MA73600	
Environment	0 to 50 °C; 100% RH	
Battery type	3 x 1.5V, alkaline	
Battery life	more than 1500 hours of continuous use	
, ,,	more than 1500 hours	
Battery life	more than 1500 hours of continuous use	

#### ACCESSORIES

MA73600	Replaceable pH electrode
M10004B	pH 4.01 buffer, 20 ml sachet, 25 pcs.
M10007B	pH 7.01 buffer, 20 ml sachet, 25 pcs.
M10010B	pH 10.01 buffer, 20 ml sachet, 25 pcs.
MA9015	Electrode storage solution, 230 ml
MA9016	Electrode cleaning solution, 230 ml
M10000B	Electrode rinse solution, 20 ml sachet, 25 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 (USA & CAN) or www.milwaukeeinst.com.

# 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 meter's performance. For your and the meter's safety do not use or store the meter in hazardous environment. To avoid damage or burn, do not perform any measurement in microwave ovens.

### WARRANTY

This instrument is warranted against defects in materials and manufacturing for a period of 2 years from the date of purchase. Electrode is warranted for 1 year. This warranty is limited to repair or free of charge replacement if the instrument 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 meter, 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.



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Naterproof

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**USER MANUAL** 

# pH54 Waterproof pH Pen



## CONDITIONING

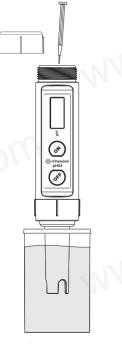
Remove the cap and immerse the **pH54** in **MA9015** storage solution for 2 hours to activate the electrode.

# CALIBRATION

Unscrew the battery compartment cap on the top of the meter and perform one of the following two-point calibration procedure, according to the required application:

Acid calibration for measurements below pH7:

- Immerse the electrode in pH7.01 (**M10007**) buffer solution.
- Allow the reading to stabilize and with a small screwdriver turn the "7" calibration trimmer inside the battery compartment until the display shows "7.01".



- Rinse the electrode with tap water and immerse it in pH4.01 (M10004) buffer solution.
- Allow the reading to stabilize and with a small screwdriver turn the "4" calibration trimmer until the display shows "4.01".

#### Alkaline calibration for measurements above pH7:

Immerse the electrode in pH7.01 (**M10007**) buffer solution.

- Allow the reading to stabilize and with a small screwdriver turn the "7" calibration trimmer until the display shows "7.01".
- Rinse the electrode with tap water and immerse it in pH10.01 (**M10010**) buffer solution.
- Allow the reading to stabilize and with a small screwdriver turn the "4" calibration trimmer until the display shows "10.01".

Replace the battery compartment cap.

## OPERATION

- Remove the protective cap.
- Turn the pH54 on by pressing the ON key.
- Immerse the electrode in the solution to be tested.
- Stir gently and wait for the reading to stabilize.
- After use, rinse the electrode with water to minimize contamination.
- Store the electrode with a few drops of storage (MA9015) or pH7 (M10007) solution in the protective cap.

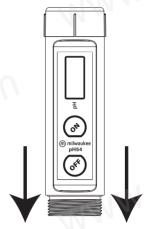


• Always replace the protective cap after use. Never use distilled or deionized water for storage purposes.

# ELECTRODE REPLACEMENT

The electrode can be easily replaced in the following way:

- Remove the protective cap.
- Unscrew the plastic ring on the top of the electrode.
- Pull out the **MA73600** pH electrode and replace it with a new one (aligning the colored pin towards the LCD side).





• Make sure the gaskets are in place before screwing back the ring.

# **BATTERY REPLACEMENT**

The **pH54** is going to turn off when the batteries are to weak. To replace the batteries unscrew the battery compartment cap and replace all three 1.5V batteries while paying attention to their polarity. Make sure the gasket is in place before screwing back the cap.

Batteries should only be replaced in a nonhazardous area using the battery type specified in this instruction manual.