



# Calibration, Maintenance & Cleaning Solutions

Milwaukee offers a wide range of calibration, maintenance & Cleaning solutions.

The use of calibration and cleaning solutions is fundamental for the correct use of electrodes and for obtaining the most accurate and reproducible readings. Often readings are not correct because the sensors have not been properly handled.

Milwaukee standard solutions are available in 230 mL bottles and 20 mL sachets.

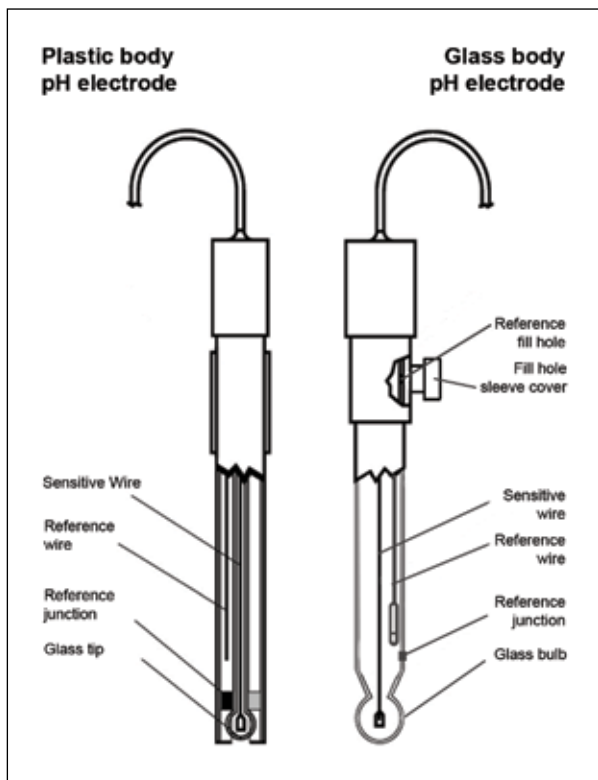
Traditional buffer solutions are packed in 230 mL leak-proof bottles and are recommended for lab applications.

Sachets are sealed against light and air and are ideal for on-the-spot calibration.

Simply open, insert the tester or electrode into the sachet and calibrate. Sachets are sold in boxes of 25 pieces.

## Calibration, Maintenance & Cleaning Solutions

<b>MA9001</b>	pH 1.68 Calibration Buffer Solution, 230 mL	<b>MA9069</b>	5000 µS/cm Conductivity Calibration Solution, 230 mL
<b>MA9004</b>	pH 4.01 Calibration Buffer Solution, 230 mL	<b>MA9070</b>	Zero Oxygen Solution, 500 mL + 12 g
<b>MA9006</b>	pH 6.86 Calibration Buffer Solution, 230 mL	<b>MA9071</b>	Electrolyte Solution for D.O. Probes, 230 mL
<b>MA9007</b>	pH 7.01 Calibration Buffer Solution, 230 mL	<b>MA9112</b>	pH 12.45 Calibration Buffer Solution, 230 mL
<b>MA9009</b>	pH 9.18 Calibration Buffer Solution, 230 mL	<b>M1000AB</b>	Combination pack of pH buffer solutions, including 10 sachets of M10007 (pH 7.01), 5 sachets of M10000 (rinse), 5 sachets of M10004 (pH 4.01), and 5 sachets of M10010 (pH 10.01); each sachet supplies 20 mL
<b>MA9010</b>	pH 10.01 Calibration Buffer Solution, 230 mL	<b>M10000B</b>	Rinse Solution - Deionized Water (box of 25x20 ml sachet)
<b>MA9011</b>	Refilling Electrolyte Solution 3.5M KCl for pH/ORP electrodes, 230 mL	<b>M10004B</b>	pH 4.01 Calibration Buffer Solution (box of 25x20 ml sachet)
<b>MA9012</b>	Refilling Electrolyte Solution 1M KNO <sub>3</sub> , 230 mL, food applications	<b>M10007B</b>	pH 7.01 Calibration Buffer Solution (box of 25x20 ml sachet)
<b>MA9015</b>	Storage Solution for pH/ORP electrodes, 230 mL	<b>M10010B</b>	pH 10.01 Calibration Buffer Solution (box of 25x20 ml sachet)
<b>MA9016</b>	Cleaning Solution for pH/ORP electrodes, 230 mL	<b>M10016B</b>	Cleaning Solution for electrodes (box of 25x20 ml sachet)
<b>MA9020</b>	200-275 mV ORP Solution, 230 mL	<b>M10030B</b>	12880 µS/cm Calibration Buffer Solution (box of 25x20 ml sachet)
<b>MA9060</b>	12880 µS/cm Conductivity Calibration Solution, 230 mL	<b>M10031B</b>	1413 µS/cm Calibration Buffer Solution (box of 25x20 ml sachet)
<b>MA9061</b>	1413 µS/cm Conductivity Calibration Solution, 230 mL	<b>M10032B</b>	1382 ppm TDS Calibration Solution (box of 25x20 ml sachet)
<b>MA9062</b>	1382 ppm TDS Calibration Solution, 230 mL	<b>M10038B</b>	6.44 ppt TDS Calibration Solution (box of 25x20 ml sachet)
<b>MA9063</b>	84 µS/cm Conductivity Calibration Solution, 230 mL	<b>M10080B</b>	800 ppm TDS solution (box of 25x20 ml sachet)
<b>MA9064</b>	80000 µS/cm Conductivity Calibration Solution, 230 mL		
<b>MA9065</b>	111.8 mS/cm Conductivity Calibration Solution, 230 mL		
<b>MA9066</b>	100% NaCl Calibration Solution, 230 mL		



## pH Electrode Storage and Maintenance

### pH Electrode Storage and Maintenance

To ensure a quick response and free-flowing liquid junction, the sensing element and reference junction must not be allowed to dry out. The following instructions apply to refillable electrodes. For gel-filled electrodes, consult instruction manual.

### Routine Storage

Soak electrode in a pH Electrode Storage Solution (MA9015). If a storage solution is unavailable, pH 4 buffer or pH7.01 may be used. The fill hole should be covered to prohibit evaporation of reference fill solution.

### Maintenance

Cleaning your electrode between and after use will help extend the life of your electrode and avoid the cost of early replacement.

### Routine Cleaning

Soak electrode in MA9016 cleaning solution for half an hour, followed by soaking it in storage solution (MA9015) for at least two hours.

### Weekly Maintenance

Inspect electrodes for scratches, cracks, salt crystal buildup, or membrane/junction deposits.

Rinse off any salt buildup with distilled water, and remove any membrane/junction deposits as directed in cleaning procedures below. The reference chamber should be drained, flushed with fresh filling solution, and refilled.