

Electrode Maintenance

Proper maintenance of electrodes means accurate and reproducible pH results and longer lifetime. To ensure you get the best possible performance from your electrode, Radiometer Analytical offers a complete kit plus a selection of maintenance and filling solutions.



GK ANNEX Electrode Maintenance Kit

The GK ANNEX Electrode Maintenance Kit (Part no. S91M001) contains all you need for regular maintenance of combined pH, glass and reference electrodes with saturated potassium chloride salt-bridge:

- ✓ Solutions for normal and intensive cleaning,
- ✓ KCl as saturated solution and crystals for refilling,
- ✓ GLP•Logbook to keep note of calibration and maintenance procedures,
- ✓ Utensils and easy-to-follow instructions.

Maintenance solutions

The maintenance requirements of electrodes vary according to the application. After measurements in aqueous solutions, cleaning with a mild solution such as ○RENOVO•N is sufficient. However, when the solutions contain protein, for example, stronger cleaning agents such as □RENOVO•X or Pepsin in HCl are required. For junctions contaminated with sulphides or AgCl precipitate, Radiometer Analytical's Thiourea Solution is ideal. The operating instructions provide cleaning instructions for each type of electrode.

Type	Description	Part No.
○RENOVO•N	Normal Cleaning Solution, 250 ml	S16M001
□RENOVO•X	Xtra Strong Cleaning Solution, 250 ml	S16M002
KS400	Pepsin in HCl Solution, 250 ml	C20C370
KS410	Thiourea Solution, 250 ml	C20C380

Filling and storage solutions

Electrode operating instructions contain full information about short and long-term storage of electrodes as well as tips on replenishing the salt-bridge where appropriate. Remember to rinse your electrode thoroughly in distilled water and seal the filling hole before putting it away. The instructions tell you whether to store the sensing element dry or in a particular solution. Follow them carefully as the lifetime of your electrode depends on its correct maintenance and storage.

Selecting the right filling solution

Reference element	Solutions
Red Rod	KCl•L and KCl•C KS100 and KCl•C
Ag/AgCl (pHC3xxx / REF3xx)	KCl•Ag
Ag/AgCl (XCxxx/ XRxxx)	KS120
Calomel	KCl•L and KCl•C KS100 and KCl•C
Hg/Hg ₂ SO ₄	KS160

Filling and storage solutions for combined and reference electrodes

Type	Description	Part No.
KS100	Saturated KCl Solution, 500 ml	C20C300
KCl•L	Saturated Solution of KCl, 100 ml	S21M002
KCl•L-30	Saturated Solution of KCl, 30 ml	S21M010
KCl•C	KCl Crystals, 15 g	S21M001
KCl•Ag	3 M KCl Solution Saturated with AgCl, 100 ml	S21M004
KCl•Ag-30	3 M KCl Solution Saturated with AgCl, 30 ml	S21M011
KS110	KCl Solution 3 M, 500 ml	C20C320
KS120	Saturated KCl + AgCl Solution, 500 ml	C20C310
KS120-30	Saturated KCl + AgCl Solution, 30 ml	S21M009
KS160	Saturated K ₂ SO ₄ Solution, 500 ml	C20C500
KS160-30	Saturated K ₂ SO ₄ Solution, 30 ml	S21M007
LiCl-30	1 M LiCl Solution, 30 ml	S21M008

MeterLab Solution Kit

(Part no. S91M002)

To help you obtain accurate calibrations with your pH2xx or pHG2xx + REF2xx Red Rod electrodes. It contains: six certified IUPAC pH standards, coloured beakers, beaker dispenser and beaker holder, KCl•L solution and KCl•C crystals.

pH Meter Solution Kit

(Part no. S91M003)

To help you obtain accurate calibrations with your pH3xxx or REF3xx + pHG3xx electrodes. It contains: three 4-7-10 Series buffers plus KCl•Ag filling solution.