

1 General

Faulty measurements, unstable measured values and very long adjustment times in pH glass electrodes usually originate in the liquid junction between the measuring solution and the reference electrode. The diffusion, streaming and Donnan potentials which arise there – usually referred to collectively as diaphragm potential – have various causes and can distort the measured values considerably, particularly if the glass membrane or the diaphragm is contaminated.

Reliable measuring results over long periods of time can only be guaranteed if the glass membrane and the diaphragm receive preventive and regular care. Cleaning by means of etching with toxic chemicals or a mechanical treatment of the diaphragm is not only complicated and expensive, it also accelerates the ageing of the pH glass electrode.

The 6.2325.000 care kit was developed for easy and gentle cleaning of pH glass electrodes. Regular use can considerably prolong its lifetime.

2 Field of application

Cleaning and regenerating pH glass electrodes with liquid electrolyte.

3 Procedure



CAUTION

Do not use the ultrasonic bath for electrodes, as they may be damaged by such a treatment.
Do not rinse the electrolyte chamber with distilled water or other liquids.

The following steps should be carried out at regular intervals:

1. Close the filler opening.
2. In the case of electrodes with flexible ground-joint diaphragm: Loosen the ground-joint diaphragm.
3. Immerse the electrode in cleaning solution deep enough to cover the diaphragm.
4. Allow the electrode to react in cleaning solution at room temperature for approx. 4 h.
5. Empty the electrolyte chamber.
6. Rinse the electrolyte chamber with electrolyte several times.
7. Immerse the electrode in storage solution for conditioning for at least 2 h.