

013598 RHE Reversible hydrogen electrode

1. Contents



(A) RHE Reversible hydrogen electrode

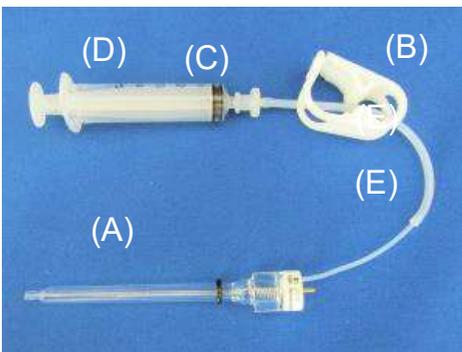
This product requires 013378 RHEK accessories kit.

2. Hydrogen gas filling method (brief version)

If an electrolyte solution is acidic ($\text{pH} < 2$), it can be used as an internal solution of RHE(A) directly. For use in other solutions, 013375 Double junction chamber kit should be used together with RHE(A) to maintain the proper potential of RHE(A).

You can check more detailed manuals in our website.

<https://www.als-japan.com/rhe.html>



2-1. Connect 013378 RHEK accessories kit (sold separately) to RHE(A) as shown in the left figure.

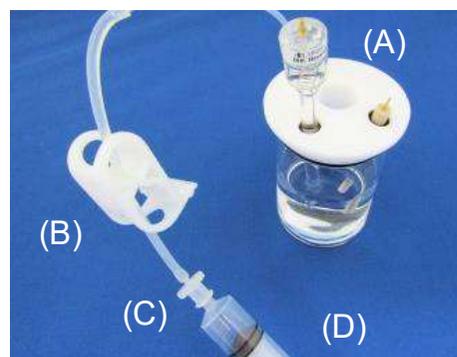
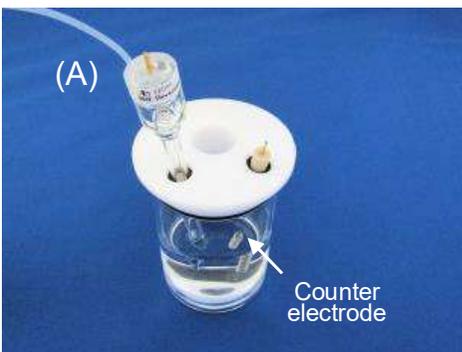
【Option】013378 RHEK accessories kit

- (B) Tubing clamp
- (C) Female lure fitting
- (D) Disposable syringe
- (E) Silicone tube (3 pcs)

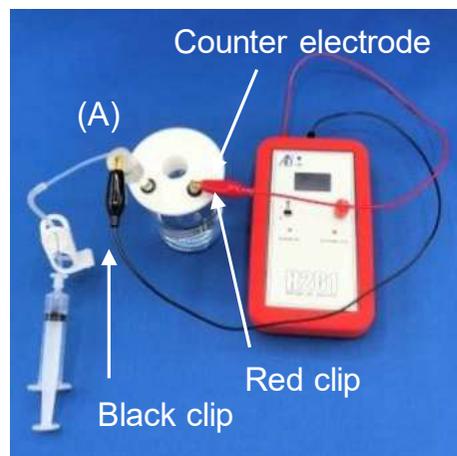
2-2. Insert RHE(A) and Pt counter electrode (options: 012961, 002233 etc.) in an acidic solution.

【Option】

- 012961 Platinum counter electrode 23cm
- 002233 Platinum counter electrode 5cm



2-3. With a tubing clamp(B) open, use a disposable syringe(D) to suck the acidic solution from RHE(A) until it reaches the disposable syringe(D). Make sure that there are no air bubbles between the female lure fitting(C) and then tighten the tubing clamp(B).



2-4. Prepare an H2G1 Portable Hydrogen Generator and connect a black clip to the RHE(A) and a red clip to the Pt counter electrode. Filling time is approximately 4 minutes with 1.2 M HCl.

For using a potentiostat, please refer to following website for details.
<https://www.als-japan.com/RHE.html>

【Related product】

013699 H2G1 Portable Hydrogen Generator

【CAUTION】

- This reference electrode should be used in aqueous solution (below $\text{pH} 7$). Do not use it in basic aqueous solution and organic solvent.
- The electrolysis current might be over 10 mA. Please check the Max. current range of the potentiostat before electrolysis.
- To avoid breaking the glass body, the electrode should be protected from strong shock.
- When using with RRDE-3A, please check the position of RHE(A). RHE(A) might be broken by collision with the motor unit of RRDE-3A.
- Use the electrode at room temperature and atmospheric pressure.
- After use, rinse the inside of RHE(A) thoroughly by pure water.
- We cannot guarantee any problems caused by usage contrary to the above notes.

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<https://www.als-japan.com> email: sales@als-japan.com