



**Beyond Battery Pte. Ltd.**  
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## Product Information

**Product Code:** CNB-12-ELEC17, CNB-12-ELEC18, CNB-12-ELEC19

**Product Name:** Mini-HydroFlex Hydrogen Reference Electrode

## Specifications

Material Shaft	PEEK (Polyetheretherketone)
Material Head	PTFE (Polytetrafluorethylene)
Shaft Diameter	1.6mm
Shaft Length	56mm
Diameter Head	20mm
Height Head	30mm plus 6.2mm for cell holder
Sealings	Fluor rubber
Thread	G1/8"
Contact Socket	Gold-plated socket for 2mm plugs
Sensor Element	Palladium gas diffusion electrode
Hydrogen Source	Replaceable hydrogen cell (80521)

## Operating Instructions

### Intended Use

The mini-HydroFlex is a reference electrode intended only for potential measurement during electrochemical measurements.

### Safety Information

The electrode is intended only for the purpose above.



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The manufacturer is not liable for damage resulting from improper use. Observe the following instructions, otherwise the electrode may be damaged, or measurement results may be falsified.

When working with chemicals, all relevant safety regulations of the manufacturer and the laboratory must be respected.

## Commissioning



1. Unscrew the black cap.



2. Take the replacement hydrogen cell and remove the protective foil. There are two openings visible. If any adhesive residue remains, remove it by rubbing with a cloth.



3. Insert the hydrogen cell with these two openings down into the recess.



4. Turn the cap back in.



5. Mark month and year on the label. Attach the sticker to the electrode head.



6. Remove the protective cap from the electrode carefully.



7. Place Mini-HydroFlex in water for 24 hours.

Please do not remove the labelling with the serial number and the sticker with the activation date.



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## Storage

After the measurements, rinse the electrode thoroughly with water. Place the hydrogen electrode in a liquid (such as measuring solution, 1 mol/l hydrochloric acid, 1 mol/l sodium hydroxide solution, water) to keep it functional.

## Runtime of Hydrogen Source

Once the end of runtime has been reached, Mini HydroFlex must not longer be stored in liquid. Replace the hydrogen source immediatly.

1. Unscrew the black cap and remove the hydrogen cell.



2. In the recess in the electrode head you see a small o-ring. Please grease this, e.g. with silicone grease.



3. Take the replacement hydrogen cell and remove the protective foil. There are two openings visible. If any adhesive residue remains, remove it by rubbing with a cloth.



4. Insert the hydrogen cell with these two openings down into the recess.



5. Turn the cap back in.



6. Mark month and year on the label. Attach the sticker to the electrode head.





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7. Place Mini-HydroFlex in water for 24 hours.

## Troubleshooting

Make sure all cables are connected correctly. Check if the connections are corroded or damp. Note the lifetime of the hydrogen source! if necessary, replace them.

## Disposal

The electrode must not be disposed of as household waste. Please dispose of the electrode in a separate collection for electrical and electronic equipment according to local regulations. This also applies to the hydrogen cells. If you have further questions, please contact us.

## Construction and Dimensions

