

## Round Bottom Cell

KEC06

### Round Bottom Cell

This borosilicate glass cell can be used for any general-purpose electrochemical measurements. This is ideal for half-cell study.



### Product details

This round-bottomed cell is composed of borosilicate glass and can withstand aggressive conditions at ambient as well as elevated temperature (up to 200°C). The available volume is 100mL with four neck joints. Among the four neck joints, one neck is B19, and the other three are B14. A glass stopper is included. It is recommended to use a little silicone grease to ensure an airtight seal.

### Application note

This four-port cell is mainly used for electrode assembly inside a glovebox, followed by electrochemical measurements outside the glovebox.

➤ The three-electrode cell set-up for half-cell configuration generally consists of either the cathode or an anode material of interest as a working electrode, platinum metal as a counter electrode, along with a reference electrode. The fourth port can

be used for attaching other accessories such as a gas-purging tube, temperature sensor.

- The two-electrode cell set-up uses one working electrode. The reference and counter electrode are connected together.
- The testing materials are typically mounted on Al or Cu-foil substrate. The foil/substrate is immersed inside the electrolyte solution with the help of the substrate holder/working electrode holder (KWEH01 or KWEH02B).

### Cleaning instruction

Cleanliness is vital for most electrochemical measurements as contaminants can lead to poorly reproducible results. Cleaning this gas-tight cell is quite easy because of its simple design. The electrolyte inside the cell should be cleaned thoroughly with repeated washing with a suitable solvent and DI water. After cleaning, it should be dried and stored in a dry place.

### Included Parts



A glass stopper to block the B-19 neck

### Optional accessories

#### Reference electrodes

Different kinds of Kanopy reference electrodes are available. One can choose any of these according to the reaction conditions, solution pH, aqueous, non-aqueous, and temperature.

- KRE01** Silver-Silver Chloride (Ag/AgCl) electrode
- KRE03** Mercury-Mercurous Chloride (Hg/Hg<sub>2</sub>Cl<sub>2</sub>, saturated KCl) or Saturated Calomel Electrode (SCE)
- KRE04** Mercury-Mercuric oxide (Hg/HgO)
- KRE06** Silver-Silver ion non-aqueous electrode

#### Platinum electrodes (working and auxiliary)

- KWE01** Platinum wire electrode
- KCE01** Platinum mesh electrode
- KCE02** Platinum coil electrode
- KWE03** Platinum foil electrode

#### Disc type electrodes (working)

- KDE01, KDE02** Glassy carbon disc electrode
- KDE03, KDE04** Gold disc electrode
- KDE05, KDE06** Platinum disc electrode

#### Working electrode holder

**KWEH01** Working electrode holder, screw type



**KWEH02B** Working electrode holder, clip type



**KEC10A**  
Banana Cable Set



**KEC10B**  
Banana Connector Pin



**KA01 (Red), KA02 (Black)**  
Alligator Clip



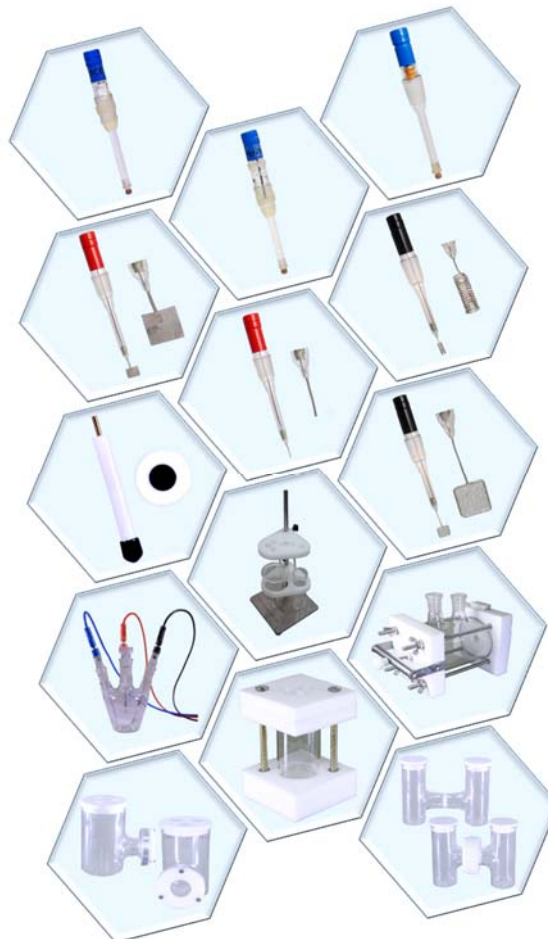
**KA17 Cu Foil**  
**Thickness:** 0.1mm  
**Width:** 300mm  
**Purity:** >99.50%



**KA19 Al Foil**  
**Thickness:** 16µm  
**Width:** 200mm  
**Purity:** >99.45%



**KA28**  
Thermometer



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### Product Information Leaflet



**Round Bottom cell**  
**Product ID: KEC06**

### Contact us



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