Question 27 (2 marks)

The diagram shows a particular cell with relevant half equations.

\[
\text{Zn(s)} + 2\text{OH}^-(aq) \rightarrow \text{ZnO(s)} + \text{H}_2\text{O(l)} + 2\text{e}^- \\
\text{HgO(s)} + \text{H}_2\text{O(l)} + 2\text{e}^- \rightarrow \text{Hg(l)} + 2\text{OH}^-(aq)
\]

Identify the anode, cathode and electrolyte for this cell.

The anode is \(\text{HgO, Hg}\).

The cathode is \(\text{Zn, ZnO, 2e}^-\).

Electrolyte is \(\text{KOH}\).

\[
\frac{1}{2} \checkmark
\]

S1