

Screen-Printed Ferrocyanide/Carbon Electrode (ref. F10)

Disposable **Screen-Printed Ferrocyanide/Carbon Electrodes** (ref. F10) are ideal for the determination of hydrogen peroxide at a low detection potential. These electrodes are recommended for the development of enzymatic biosensors based on oxidases, for working with microvolumes and for decentralized assays.

Ceramic substrate: L33 x W10 x H0.5 mm

Electric contacts: Silver

The electrochemical cell consists on:

Working electrode: Ferrocyanide/Carbon (4 mm diameter)

Counter electrode: Carbon

Reference electrode: Silver



Screen-printed Ferrocyanide/Carbon Electrodes are commercialised in 75 units packs. They should be stored at room temperature in a dry place.

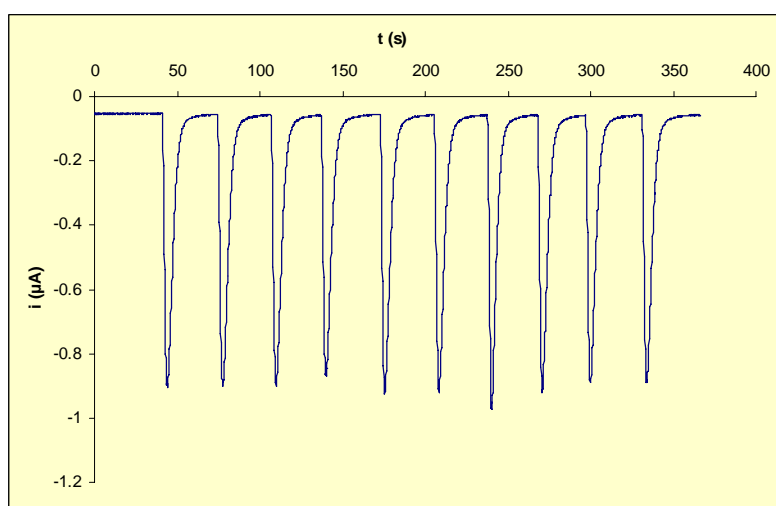


Figure 1. Amperometric detection of hydrogen peroxide in a flow injection analysis system with our easy to use flow cell. The amperometric responses for $1 \cdot 10^{-3} \text{ M H}_2\text{O}_2$ at a ref. F10 electrode do not show any fouling effect. $\text{RSD}\% = 3.5$, $n = 10$.

$E_{\text{det}} -0.15 \text{ V}$; Flow rate 2 ml/min; Flow carrier 0.05 M phosphate buffer, pH 6.5 and 0.1 M KCl.

These **Ferrocyanide/Carbon Electrodes (ref.F10)** can also be used in batch, for chronoamperometric detection of hydrogen peroxide using a drop of 40 μL of sample.

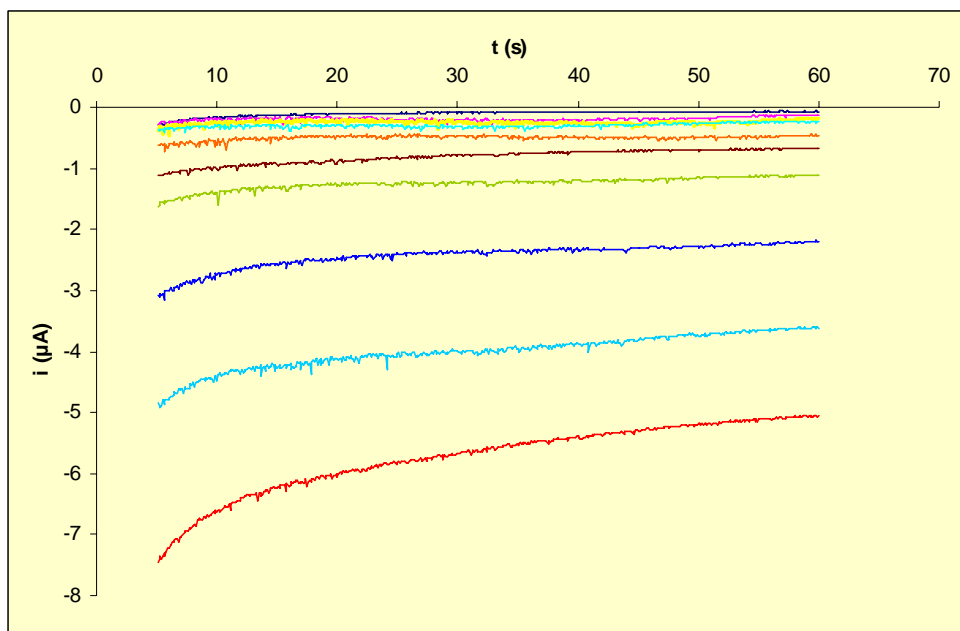


Figure 2. In this assay different electrodes are used for each measurement. Analysis of hydrogen peroxide between $2.5 \cdot 10^{-5}$ M and $1 \cdot 10^{-3}$ M is presented in the figure. $E_{det} -0.15$ V (60 s); Electrolyte solution 0.05 M phosphate buffer, pH 6.5 and 0.1 M KCl.

ref. CAC



Figure 3. Cable connector for screen printed electrodes



Figure 4. Flow-cell for screen printed electrodes

