

Screen-Printed Carbon Electrodes

(ref. 110)

Disposable **carbon electrodes** (ref. 110).
Ideal for working with microvolumes, for decentralized assays or to develop specific sensors.

Useful for undergraduate lab to avoid tedious polishing of solid electrodes.

Ceramic substrate: L33 x W10 x H0.5 mm

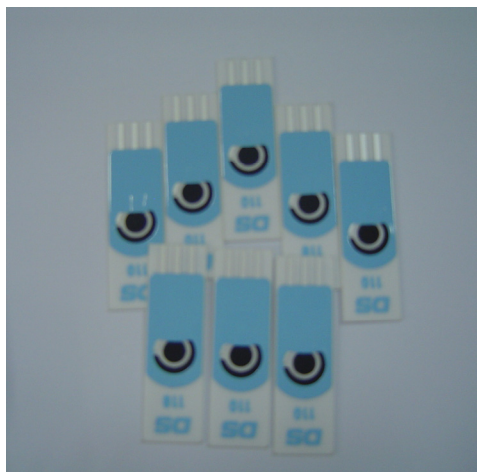
Electric contacts: Silver

The electrochemical cell consists on:

Working electrode: Carbon (4 mm diameter)

Counter electrode: Carbon

Reference electrode: Silver



Screen printed carbon electrodes (ref. 110) are commercialised in a 75 units pack. They should be stored at room temperature in a dry place.



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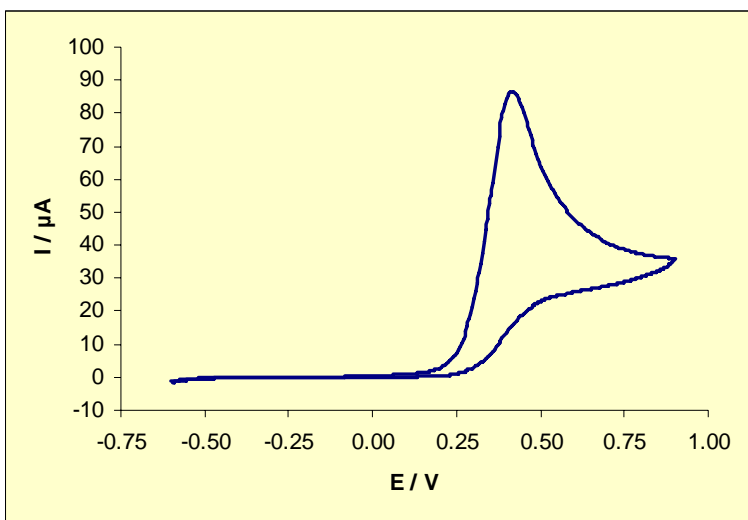
info@dropsens.com



Also a specific **connector** (ref. DSC) that acts as an interface between the screen-printed electrode and your potentiostat is available at [DropSens](#).

Dimensions: L65 x W65 x H40 mm

Electrochemical behaviour and electroanalytical performance of SPCEs (ref. 110) for some benchmark redox systems



[DropSens](#) SPCEs (ref. 110) exhibit a high electrochemical activity. An example is observed for NADH oxidation, that is usually poorly defined at conventional carbon electrodes. [DropSens](#) electrodes facilitate low potential amperometric measurements of NADH.

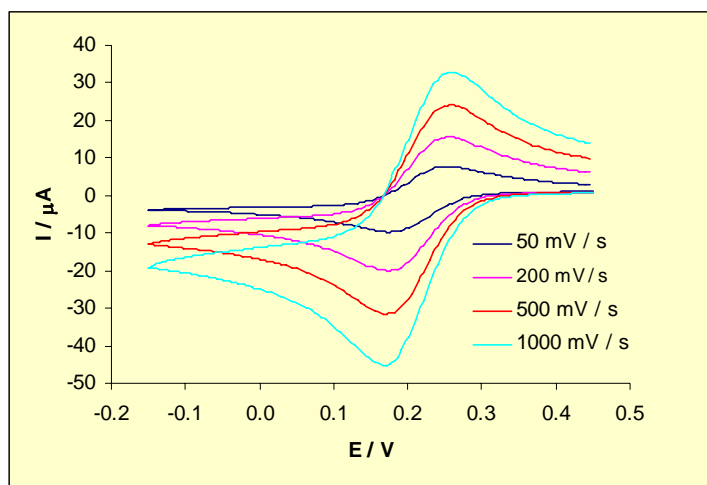
Cyclic voltammogram of $5 \cdot 10^{-3}$ M NADH in 0.05 M phosphate buffer solution pH 7.4

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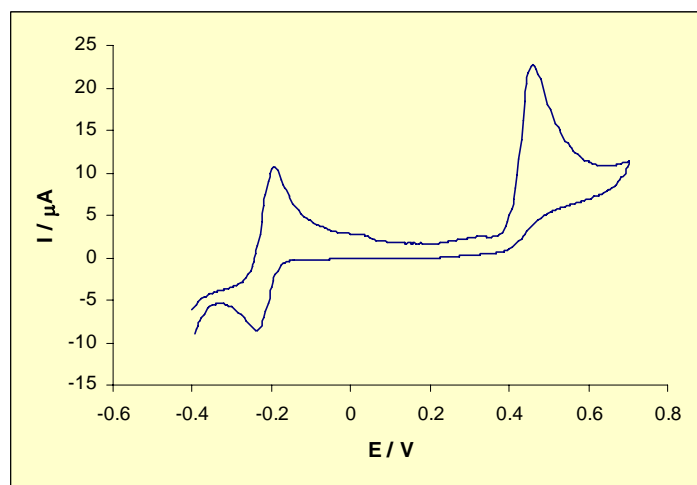
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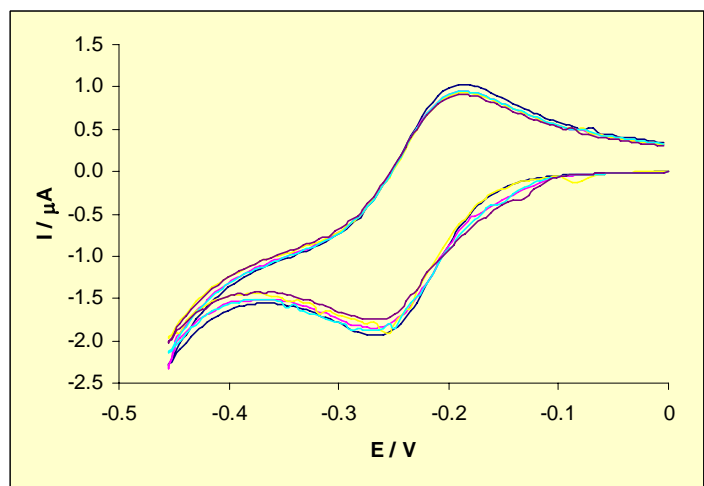
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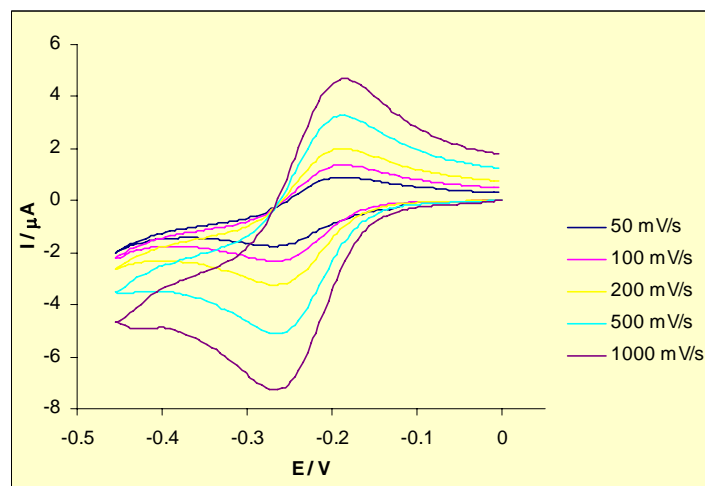
Cyclic voltammograms of $5 \cdot 10^{-4} \text{ M K}_3[\text{Fe}(\text{CN})_6]$ in $0.1 \text{ M H}_2\text{SO}_4$ electrolyte solution at various scan rates



Cyclic voltammogram of $5 \cdot 10^{-4} \text{ M indigo carmine}$ in $0.1 \text{ M H}_2\text{SO}_4$ electrolyte solution at 100 mV/s



Cyclic voltammograms of $1 \cdot 10^{-4} \text{ M hexaamineruthenium (III)}$ in 0.1 M KCl electrolyte solution at 50 mV/s . $n = 5$ (different SPCEs), $\text{RSD}\% = 4\%$



Cyclic voltammograms of $1 \cdot 10^{-4} \text{ M hexaamineruthenium (III)}$ in 0.1 M KCl electrolyte solution at different scan rates. $\Delta E = 59 \text{ mV}$

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